

SUBMITTAL DATA SHEET



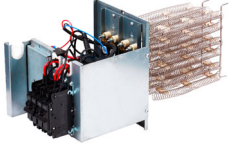
SLIM4 Heat Pump Air Handler System

Outdoor	Indoor	Controls		
				
		Wifi Thermostat (Included)	Remote Control (Included)	Smart Thermostat (Optional)

Outdoor Key Features	Indoor Key Features
• Eco-Friendly R454B Refrigerant • Advanced Inverter Technology • Anti-Corrosive Gold-Fin Coating • Thin and Compact Design • Separate 24V and RS485 - (S1/S2) Terminals • Intelligent Defrosting • 3 Minutes Restart Delay • Heating operation at -22°F • Quiet Operation • Auto-Restart • Drain Pan Heater and Compressor Heating Belt • *10 Year Warranty	• Dual-Voltage 115V or 208~230V • Flared Connections • Factory installed R454B Leak Sensor • Multi-Positional Installation Flexibility • All-Aluminum Coil • Multiple Fan Speeds • Constant Airflow up to 0.8" in W.C. • Electronic Expansion Valve Control • 24V or RS485 Communication • Self-Diagnostic • Auxiliary Heating • *10 Year Warranty

Accessories

Heater Kit



Model	Description
WVM0502B	5kW Heat Kit w/ circuit breaker
WVM0802B	7.5kW Heat Kit w/ circuit breaker
WVM1002B	10kW Heat Kit w/ circuit breaker
WVM1502B	15kW Heat Kit w/ circuit breaker
WVM2002B	20kW Heat Kit w/ circuit breaker
WVM2502B	25kW Heat Kit w/ circuit breaker

EcoBridge Integration Kit



Model	Description
22011500000438	• R454B Integration Kit for non-A2L indoors • Integration Board, R454B Sensor, and Sensor bracket included

SLIM Smart Thermostat



Model	Description
SLIMST900X	• Touchscreen Smart Thermostat • 24V or 485V Communication • Can control Multiple units • Advanced Icheck Self-Diagnostics • Wi-Fi compatible with Amazon, Alexa, Google Home, Apple Home

Dr. Smart Diagnostic Tool



Model	Description
17222000A55927	• Diagnostic tool for SLIM & M4 Series • Real-Time System Communication & Simulations • Easy Navigation with Display • Lightweight with Built-in Magnets

* Warranty subject to terms and conditions. Customer is responsible for remaining up to date on all warranty requirements. Warranty is valid only when all conditions outlined in the official warranty documentation are met. Current warranty details available at <https://innovair.com/warranty/>

SUBMITTAL DATA SHEET



Series Name: SLIM4 Hyper Heat Pump Series
Model Number: SHV18H2BA / SAV18BDA

Air Handler 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)		618.0 / 576.8 / 529.7 / 488.5 / N/A
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		N/A/41/39/33/N/A
Dimension (W×D×H)	inch	17.52×21× 45
	mm	445×534×1143
Package (W×D×H)	inch	20.87×26.5×48.62
	mm	530×675×1235
Net/Gross Weight	lbs	105.82/126.76
	kg	48/57.5

OUTDOOR SPECIFICATION		
Compressor Type		ROTARY
Compressor Model		KTM240D46UKT2
Refrigerant		R454B
Refrigerant Oil Charge(mL)		620
Refrigerant Oil		VG74
Outdoor Air Flow (Max) (CFM)		1765.7
Outdoor Noise Level (dBA)		59
Dimension (W×D×H)	inch	35.04 x 13.46 x 26.50
	mm	890.0×342.0×673.0
Package (W×D×H)	inch	39.17 x 15.67 x 29.13
	mm	995×398×740
Net/Gross Weight	lbs	101.41/109.13
	kg	46/49.5

EFFICIENCY			
Cooling		Heating	
SEER2	19.0	HSPF2-4	9.7
EER2	12.5	COP	3.20

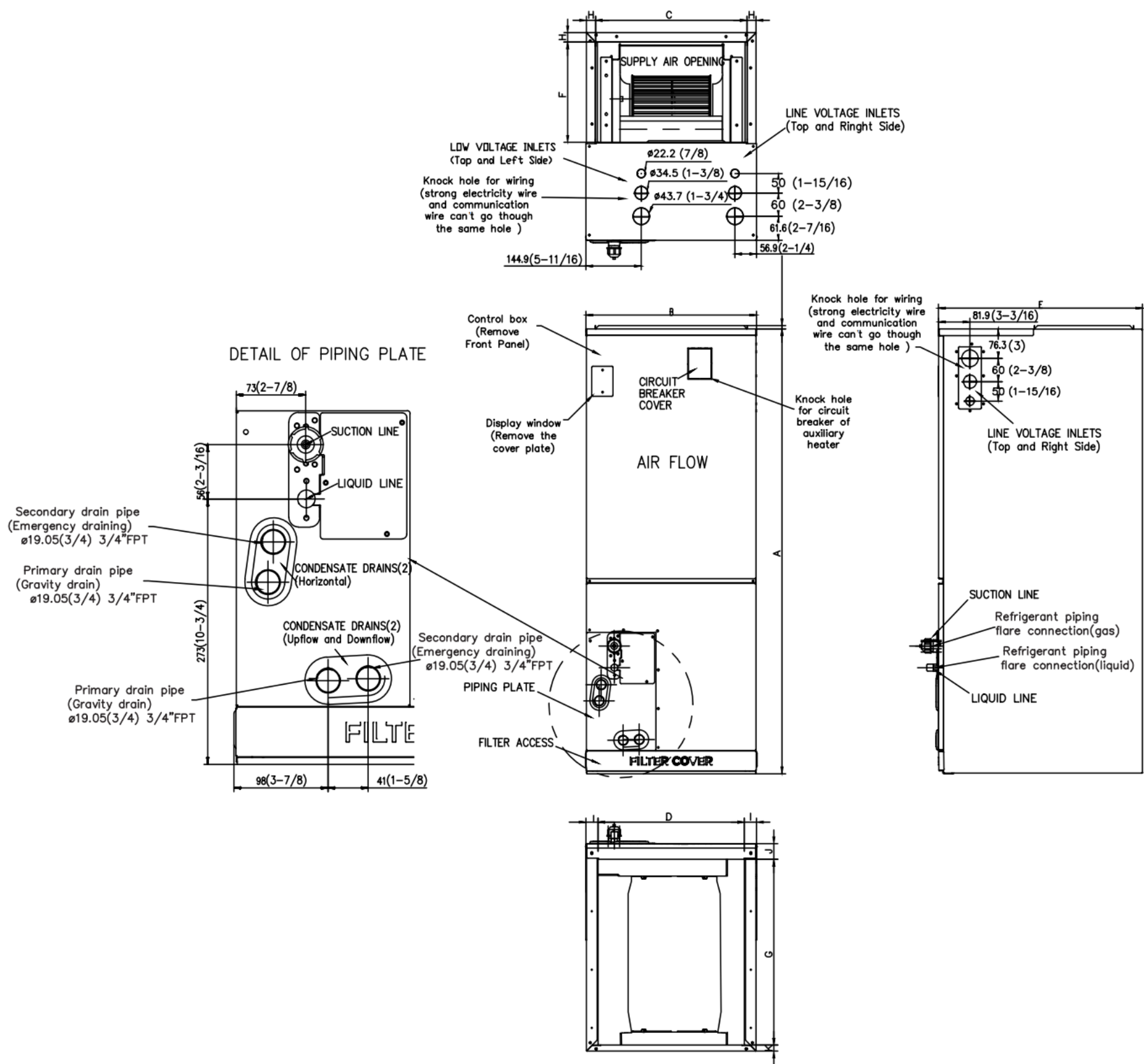
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	18000
Min/Max Capacity	5600~22000
Moisture Removal(L/h)	1.65
Standard Operating Range(°F/°C)	-22~122(-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	19000
1. @ 47°F Min/Max Capacity	6000~22000
2. @ 17°F Rated	15000
3. @ 5°F Rated: Capacity / COP	18000/2
3. @ 5°F Max: Capacity	18000
Standard Operating Range(°F/°C)	-22~75(-30~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

ELECTRICAL	
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	5.5/4.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	16
Outdoor MOP	20
Communication Wiring	AWG 20-2
Compressor RLA	10.5
Outdoor Fan Motor RLA	0.9
Outdoor Fan Motor W	80
Indoor Fan Motor RLA	2
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	1445(440 ~ 1950)
System Power Input @ Heating (W)	1740(500 ~1950)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

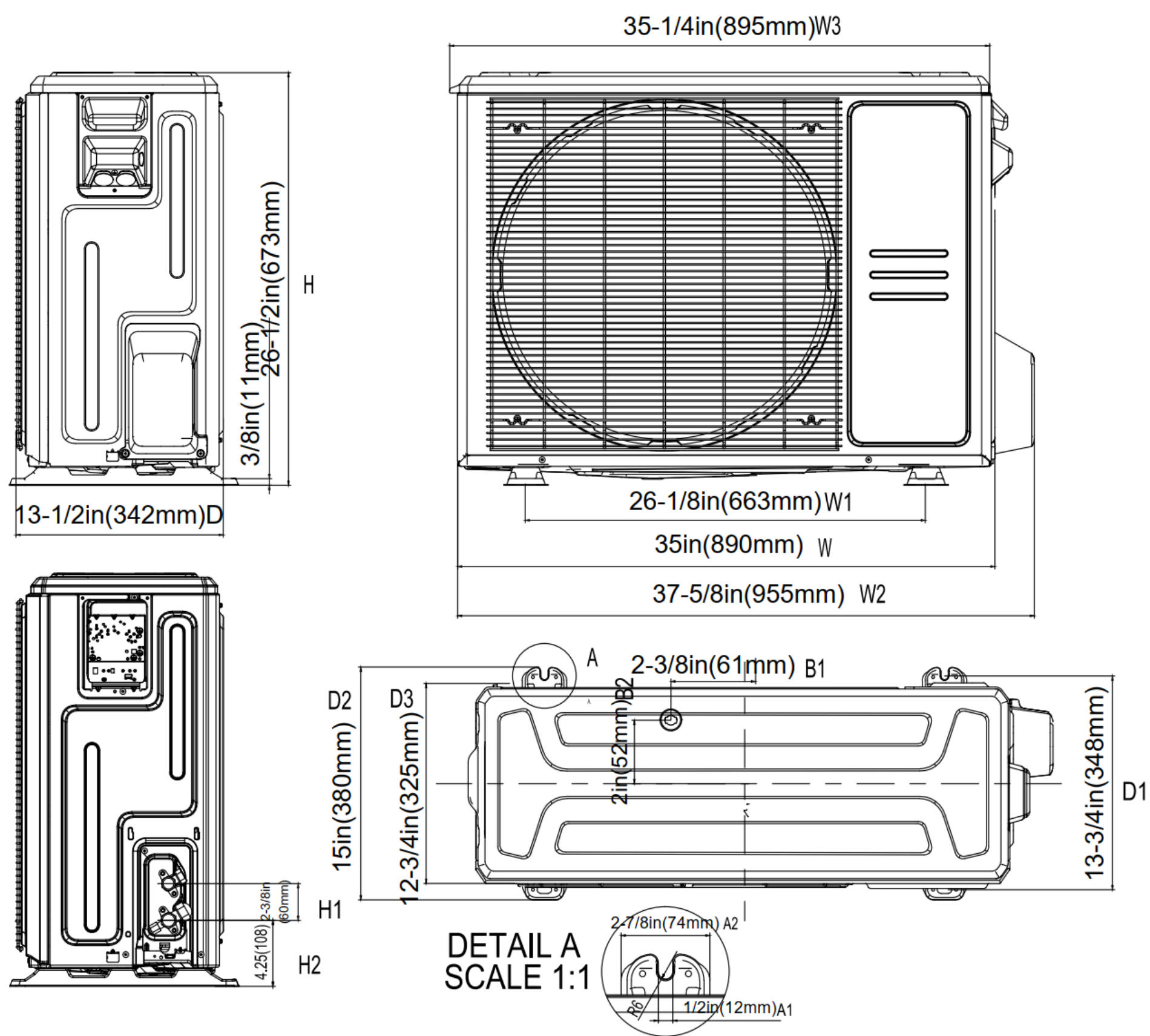
PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	98.4(30)
Max. Height Difference(ft/m)	65.6(20)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	74.08(2.1)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

Indoor Unit Dimension

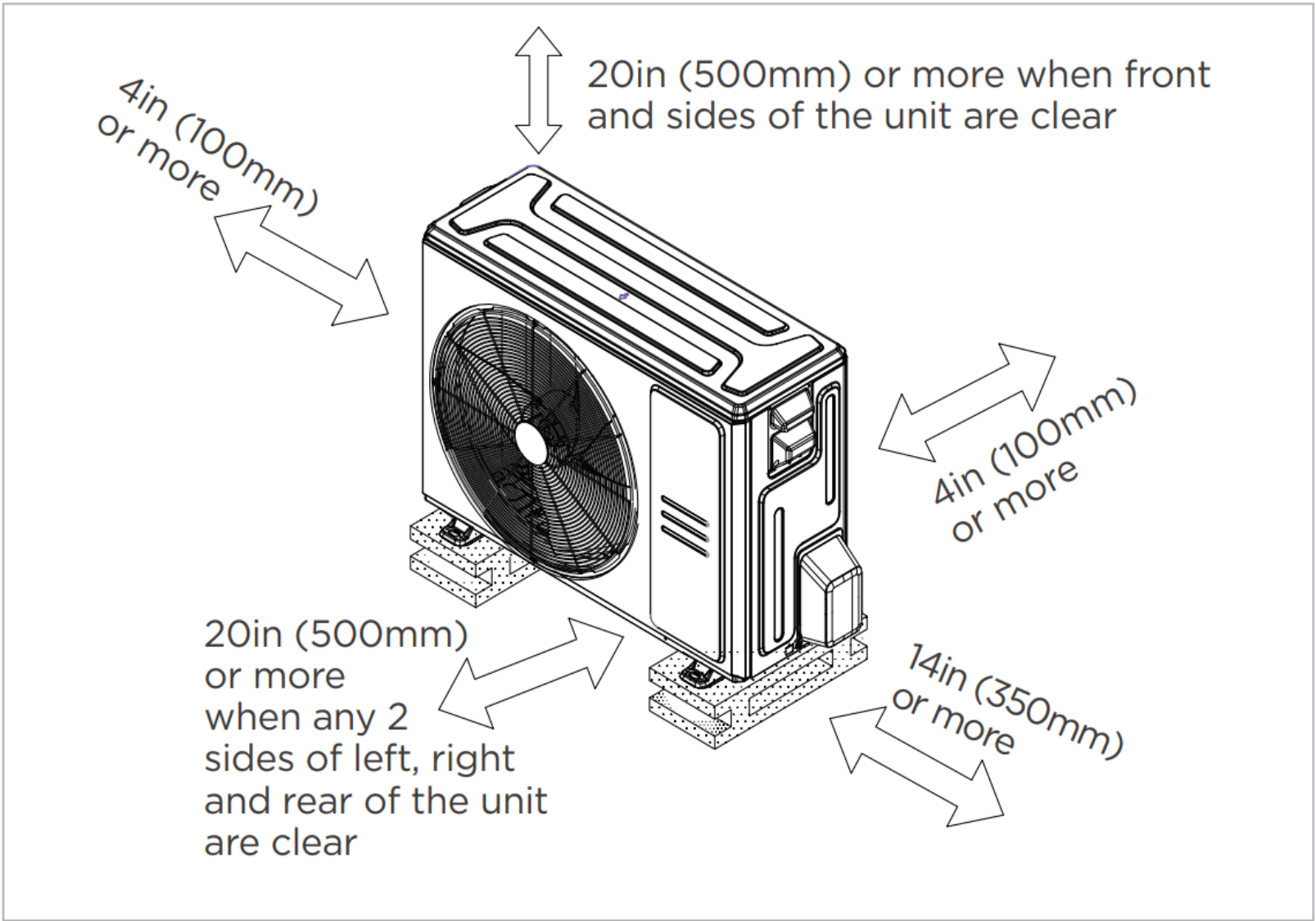


Dimensions		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
c	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	3/4	16	3/4	19

Outdoor Unit Dimension

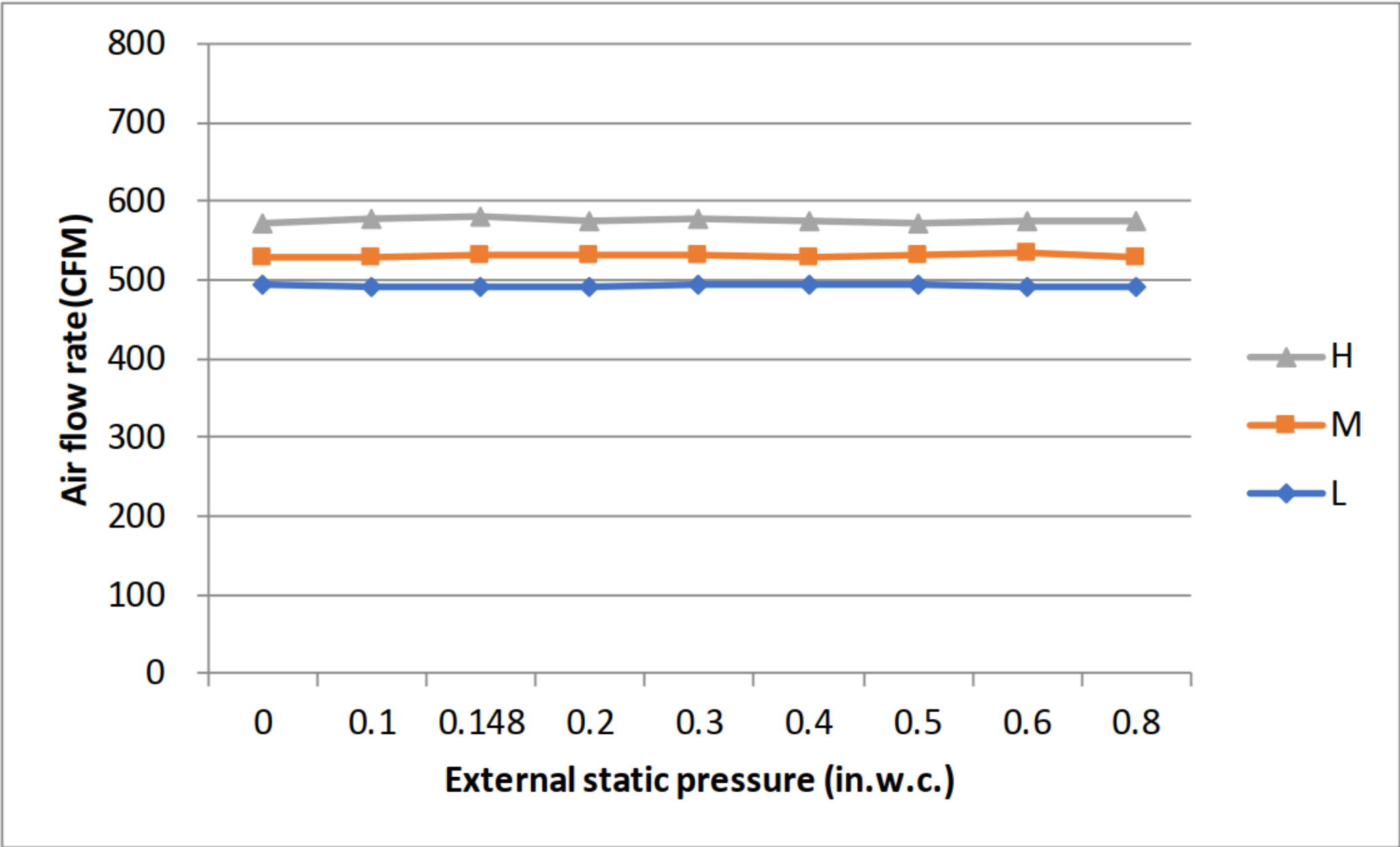


Installation Instruction For Outdoor Unit



☒ Meets all spatial requirements shown in Installation Clearance Requirements above.

Fan Performance For Indoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
 - Two way communication wired controller:120N(X6)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F*
- Chassis heater and crankcase heater equipped as standard

* For 36K model,
rated cooling
capacity/heating
capacity at -
4F=100%

SUBMITTAL DATA SHEET



Series Name: SLIM4 Hyper Heat Pump Series
Model Number: SHV24H2BA / SAV24BDA

Air Handler 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)		824.0 / 759.3 / 694.5 / 629.8 / N/A
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		N/A/44/42/28/N/A
Dimension (W×D×H)	inch	17.52×21×45
	mm	445×534×1143
Package (W×D×H)	inch	20.87×26.5×48.62
	mm	530×675×1235
Net/Gross Weight	lbs	105.60/127.43
	kg	47.9/57.8

OUTDOOR SPECIFICATION		
Compressor Type		ROTARY
Compressor Model		KTM240D46UKT2
Refrigerant		R454B
Refrigerant Oil Charge(mL)		620
Refrigerant Oil		VG74
Outdoor Air Flow (Max) (CFM)		1765.7
Outdoor Noise Level (dBA)		60
Dimension (W×D×H)	inch	35.04 x 13.46 x 26.50
	mm	890.0×342.0×673.0
Package (W×D×H)	inch	39.17 x 15.67 x 29.13
	mm	995×398×740
Net/Gross Weight	lbs	102.29/109.13
	kg	46.4/49.5

EFFICIENCY			
Cooling		Heating	
SEER2	18.3	HSPF2-4	10.0
EER2	11.7	COP	3.33

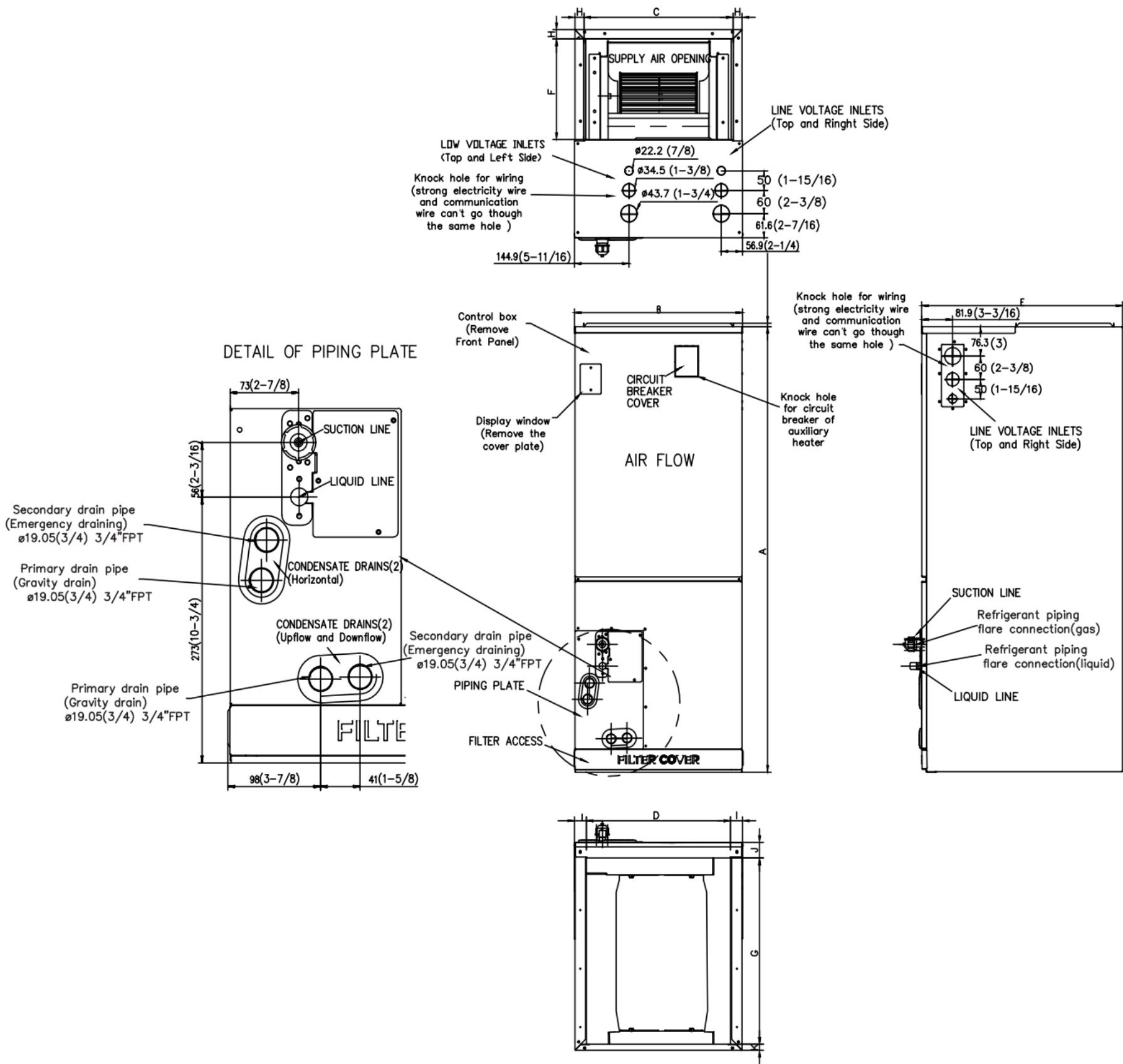
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	23000
Min/Max Capacity	7200~27000
Moisture Removal(L/h)	2.05
Standard Operating Range(°F/°C)	-22~122(-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	24000
2. @ 47°F Min/Max Capacity	7100~30000
3. @ 17°F Rated	20000
4. @ 5°F Rated: Capacity / COP	21600/1.87
5. @ 5°F Max: Capacity	21600
Standard Operating Range(°F/°C)	-22~75(-30~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

ELECTRICAL	
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	5.5/4.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	19
Outdoor MOP	20
Communication Wiring	AWG 20-2
Compressor RLA	14
Outdoor Fan Motor RLA	1
Outdoor Fan Motor W	80
Indoor Fan Motor RLA	3
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	1965(530 ~ 2870)
System Power Input @ Heating (W)	2112(440 ~2730)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

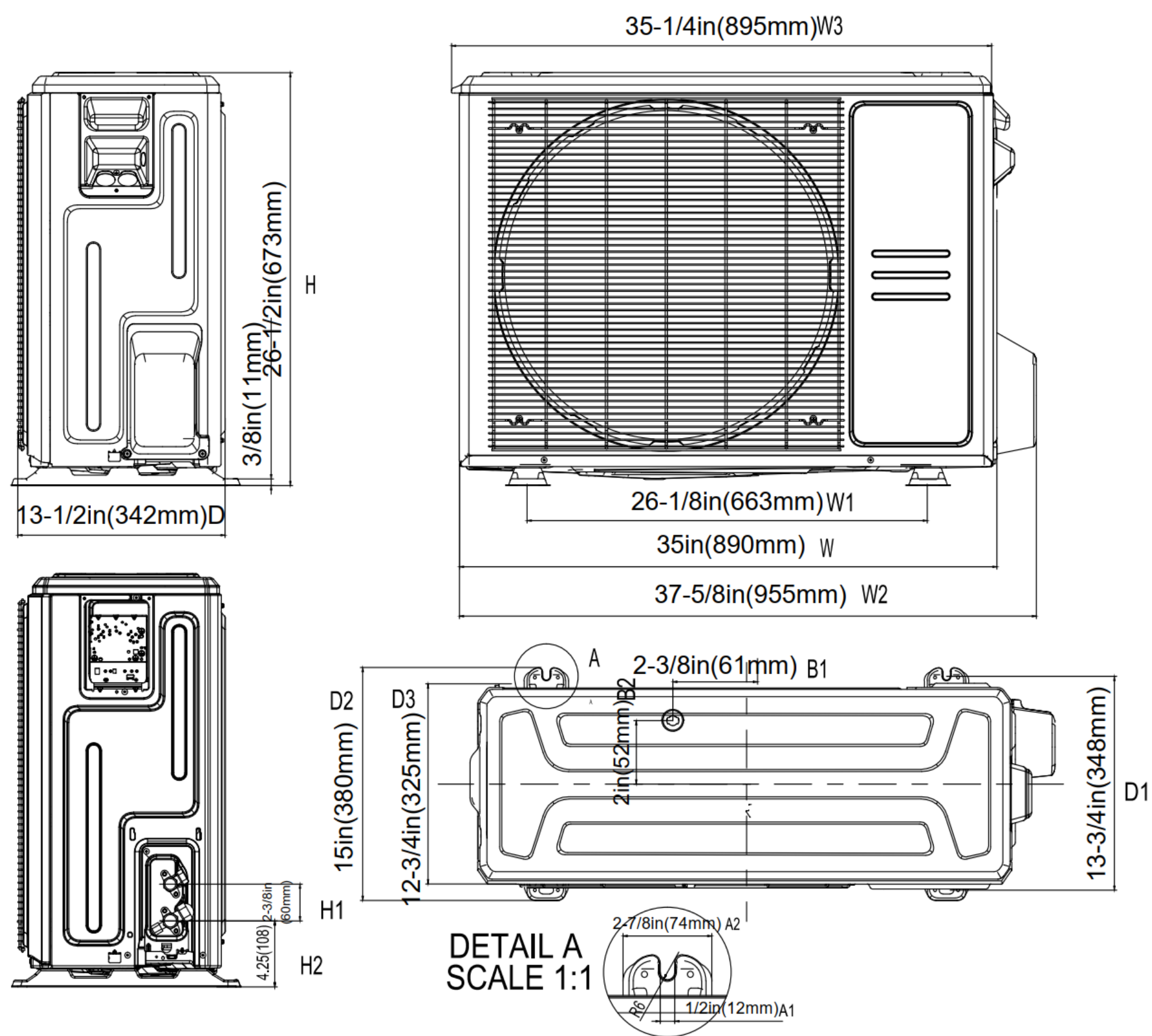
PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	164(50)
Max. Height Difference(ft/m)	82(25)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	74.08(2.1)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

Indoor Unit Dimension

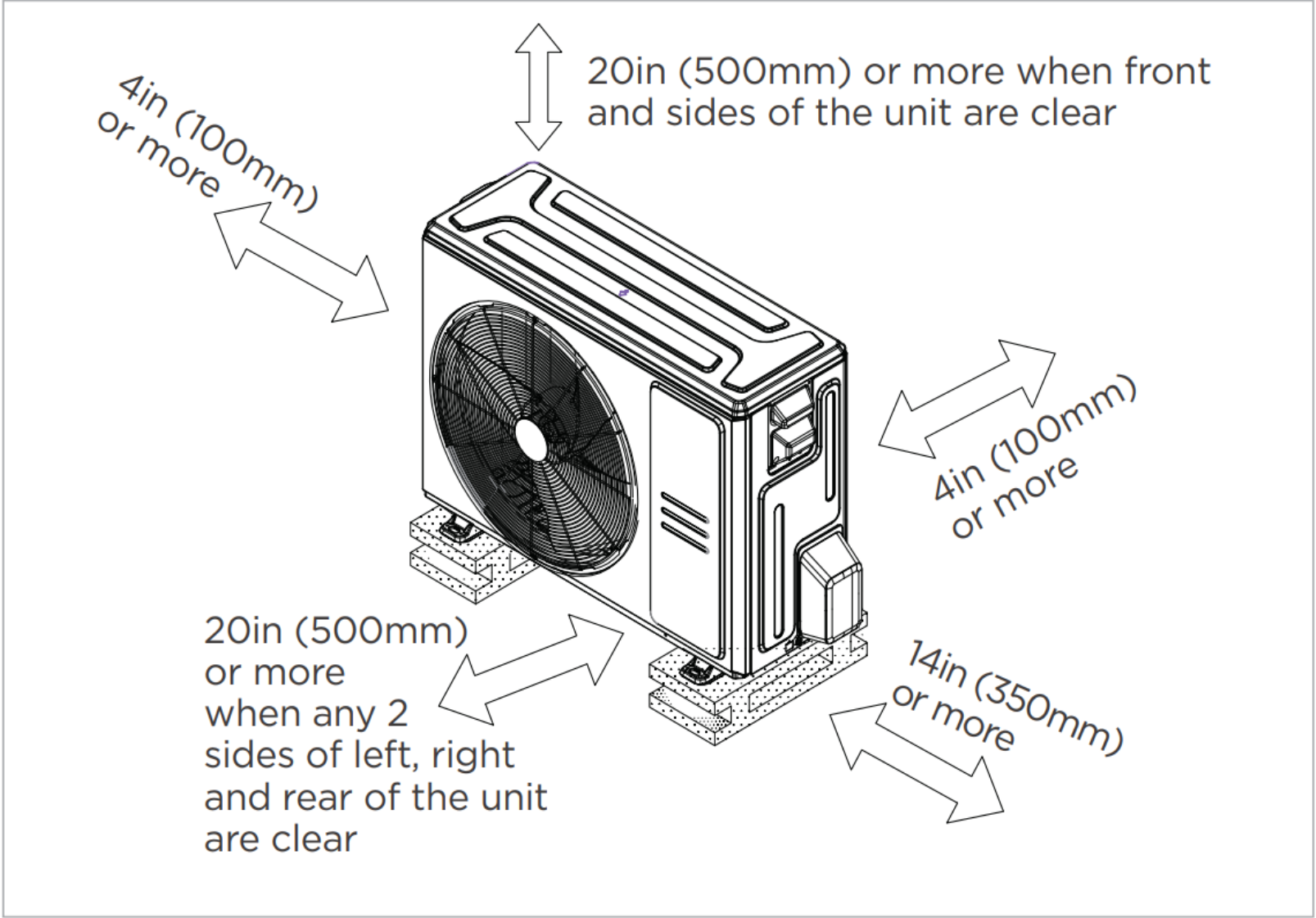


Dimensions		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
c	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	3/4	16	3/4	19

Outdoor Unit Dimension

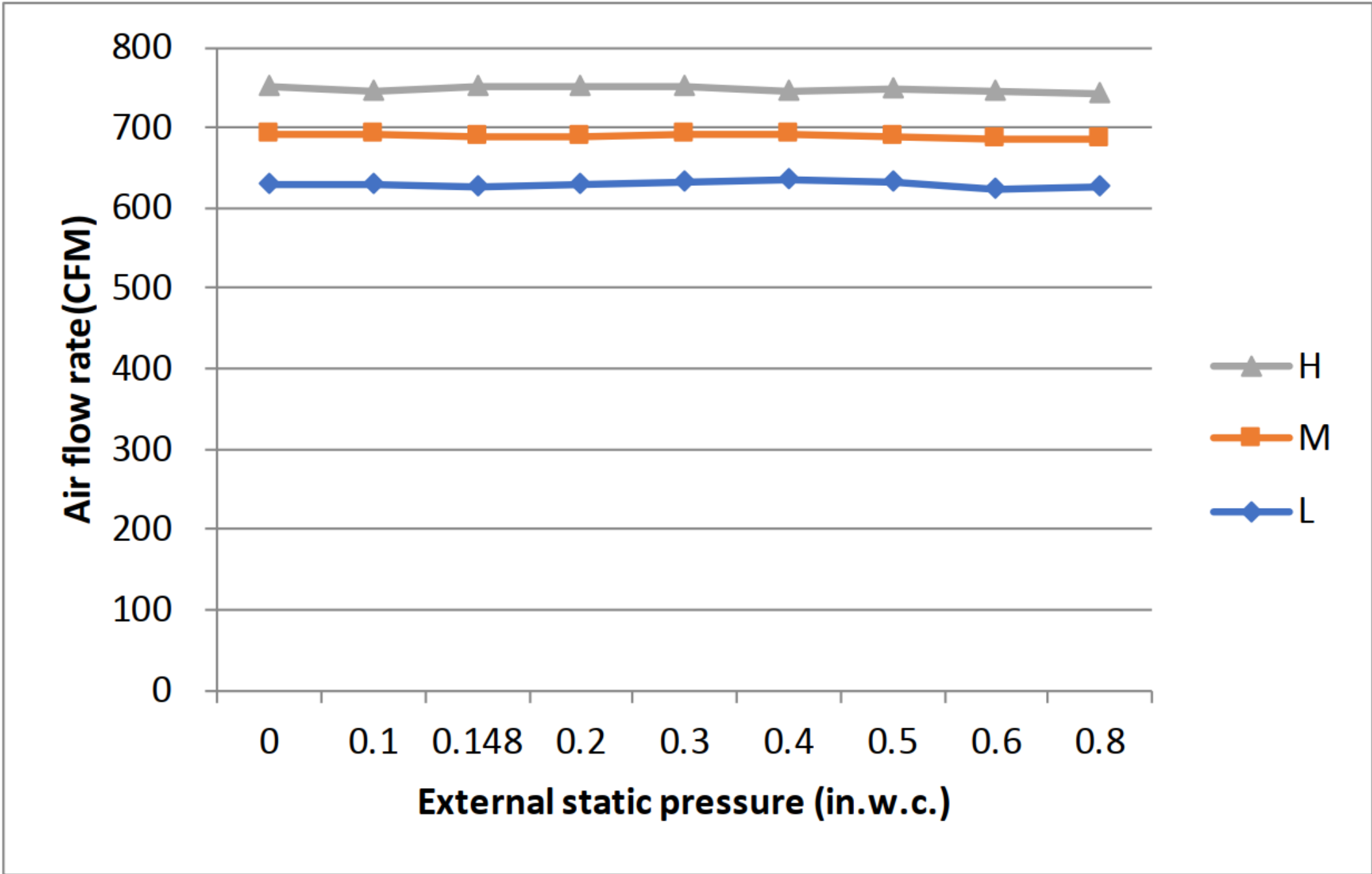


Installation Instruction For Outdoor Unit



☒ Meets all spatial requirements shown in Installation Clearance Requirements above.

Fan Performance For Indoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
 - Two way communication wired controller:120N(X6)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F*
- Chassis heater and crankcase heater equipped as standard

* For 36K model,
rated cooling
capacity/heating
capacity at -
4F=100%

SUBMITTAL DATA SHEET



Series Name: SLIM4 Hyper Heat Pump Series
Model Number: SHV30H2BA / SAV30BDA

Air Handler 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)		988.8 / 894.7 / 806.4 / 712.2 / N/A
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		47.0/46.0/43.0/27.5/N/A
Dimension (W×D×H)	inch	21×21×49
	mm	534×534×1245
Package (W×D×H)	inch	24.41×26.57×52.56
	mm	620×675×1335
Net/Gross Weight	lbs	128.97/153.44
	kg	58.5/69.6

OUTDOOR SPECIFICATION		
Compressor Type		ROTARY
Compressor Model		MTH356UKRC8FQL
Refrigerant		R454B
Refrigerant Oil Charge(mL)		1300
Refrigerant Oil		HAF68D1A
Outdoor Air Flow (Max) (CFM)		3001.8
Outdoor Noise Level (dBA)		60.5
Dimension (W×D×H)	inch	37.24 x 16.14 x 31.89
	mm	946.0×410.0×810.0
Package (W×D×H)	inch	42.91 x 19.68 x 34.84
	mm	1090×500×885
Net/Gross Weight	lbs	164.02/174.60
	kg	74.4/79.2

EFFICIENCY			
Cooling		Heating	
SEER2	16.8	HSPF2-4	10.0
EER2	11.7	COP	3.65

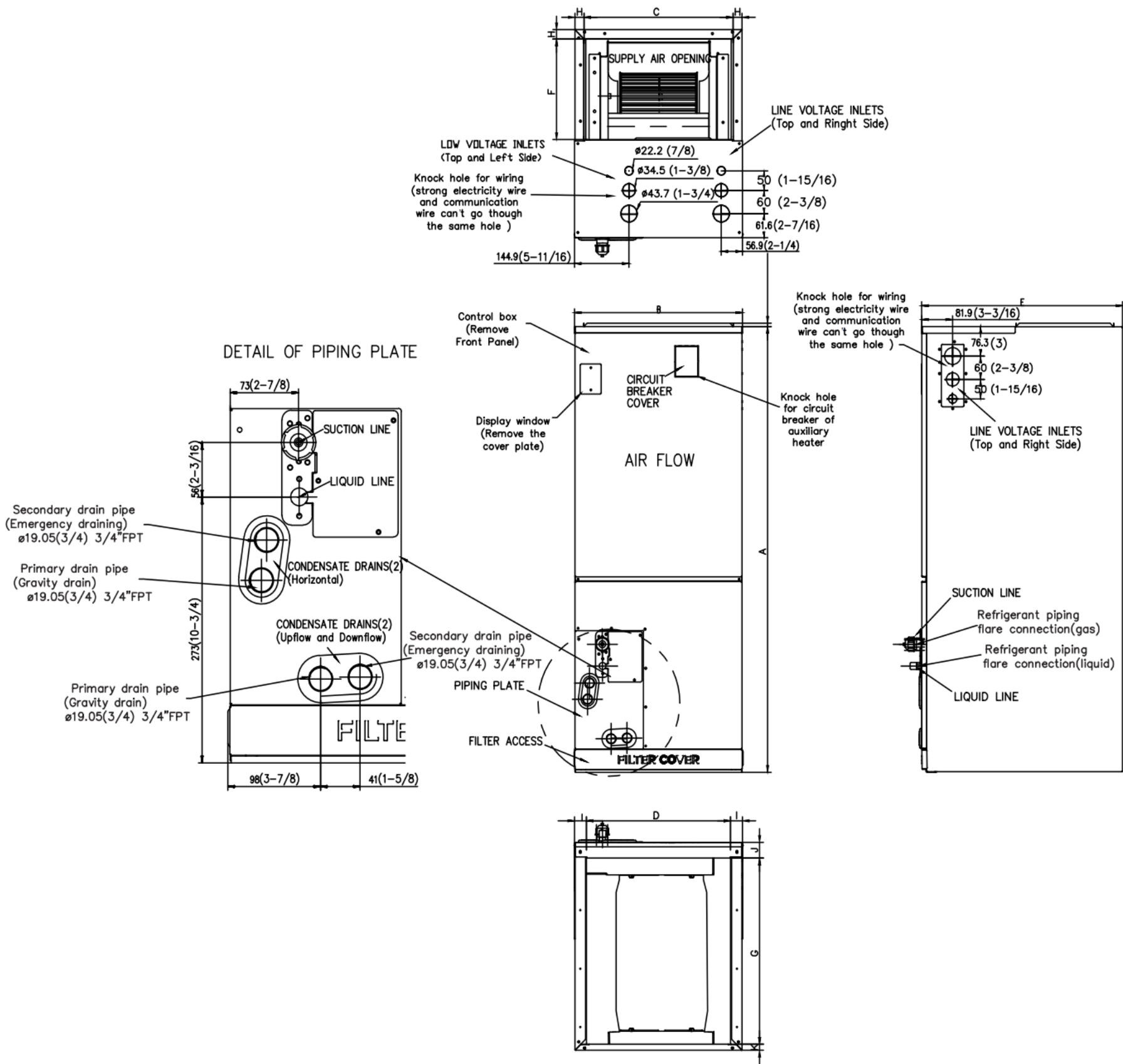
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	30000
Min/Max Capacity	12800~39000
Moisture Removal(L/h)	2.77
Standard Operating Range(°F/°C)	-22~122(-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	34000
2. @ 47°F Min/Max Capacity	10300~38500
3. @ 17°F Rated	23800
4. @ 5°F Rated: Capacity / COP	32600/1.96
5. @ 5°F Max: Capacity	32600
Standard Operating Range(°F/°C)	-22~75(-30~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

ELECTRICAL	
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	8.0/6.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	29.5
Outdoor MOP	30
Communication Wiring	AWG 20-2
Compressor RLA	22.4
Outdoor Fan Motor RLA	1.5
Outdoor Fan Motor W	120
Indoor Fan Motor RLA	4.5
Indoor Fan Motor W	375
System Power Input @ Cooling (W)	2567(850 ~ 3620)
System Power Input @ Heating (W)	2790(655 ~3020)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

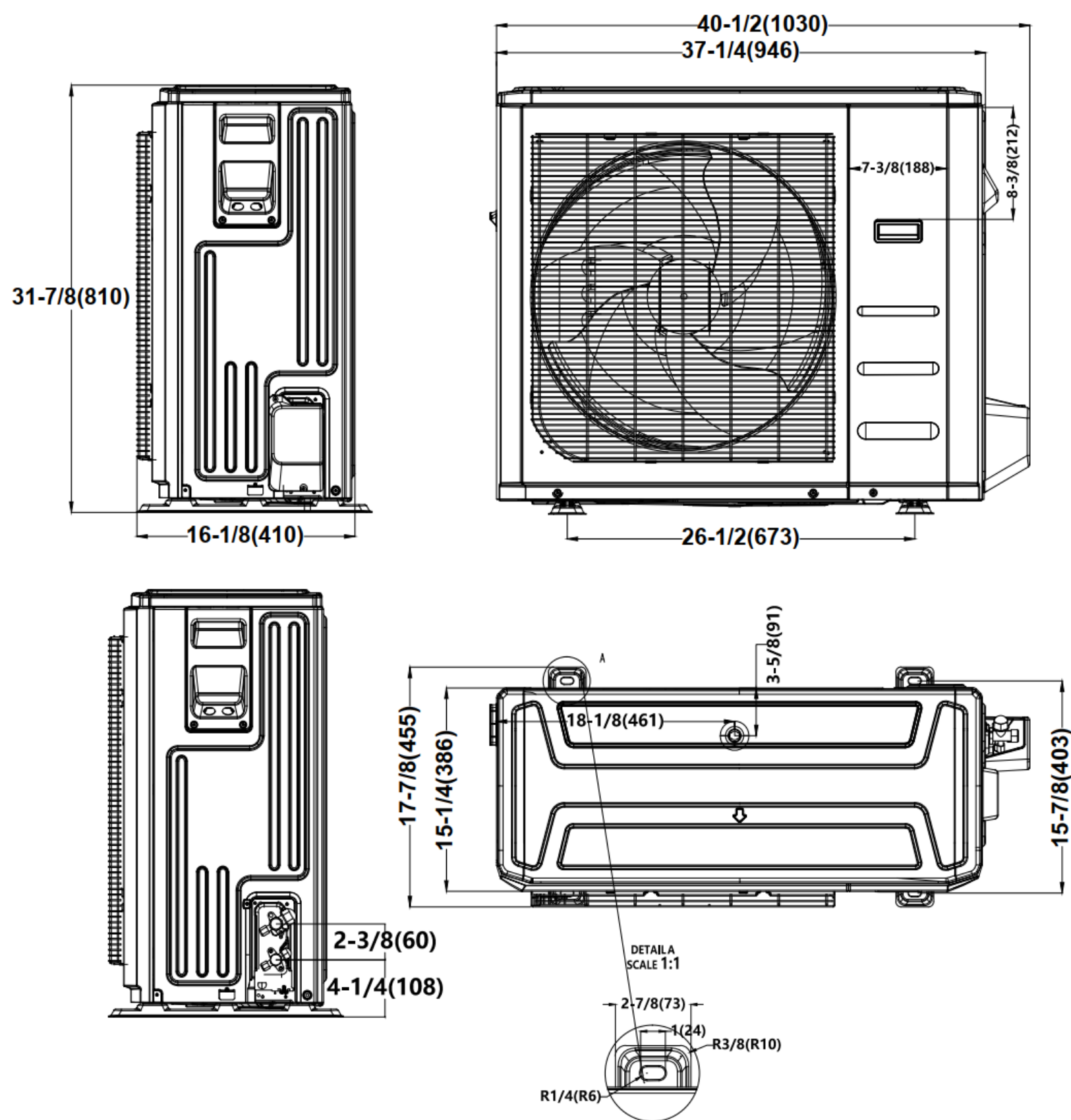
PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	164(50)
Max. Height Difference(ft/m)	82(25)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	105.82(3)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

Indoor Unit Dimension

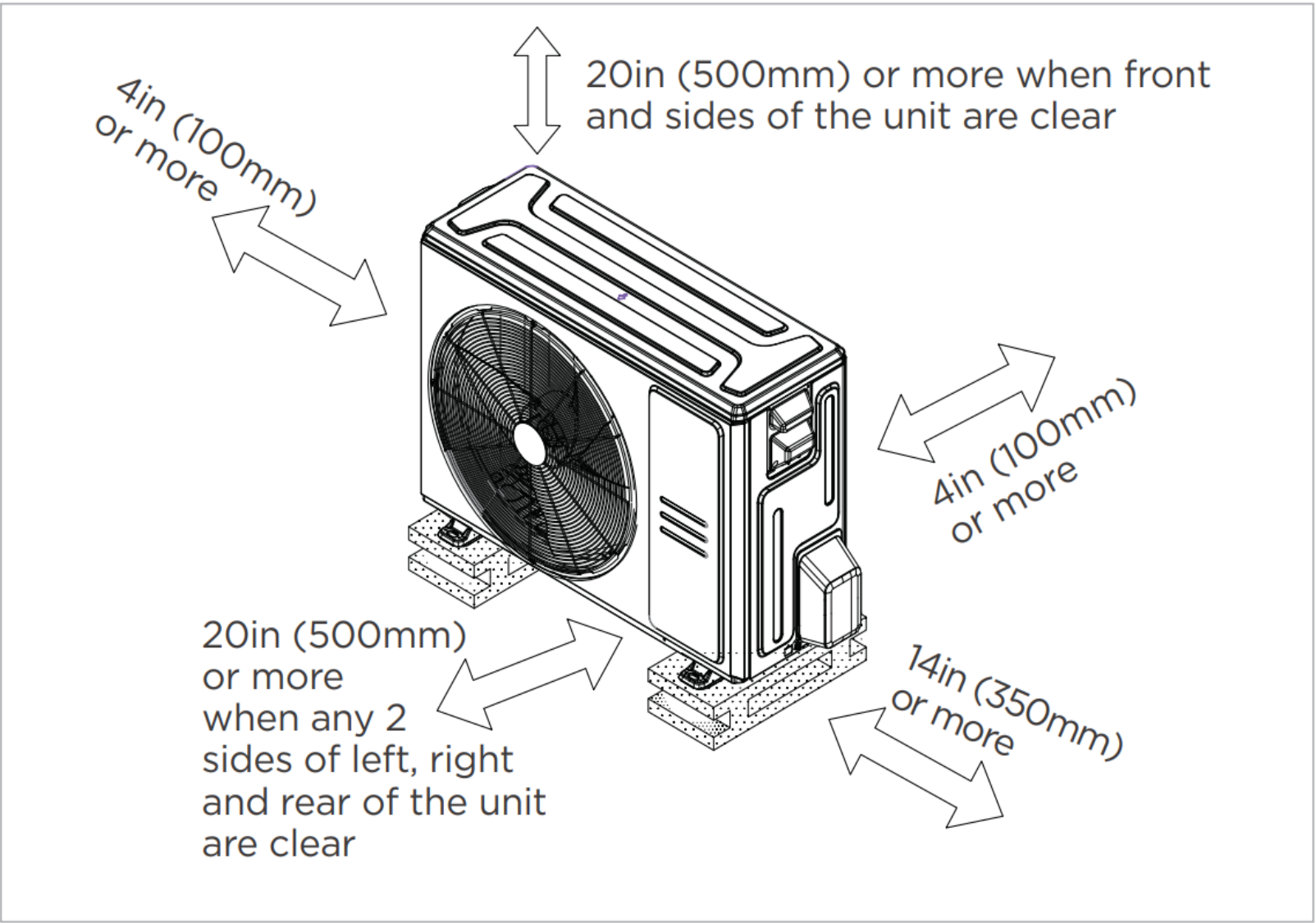


Dimensions		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
c	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	3/4	16	3/4	19

Outdoor Unit Dimension

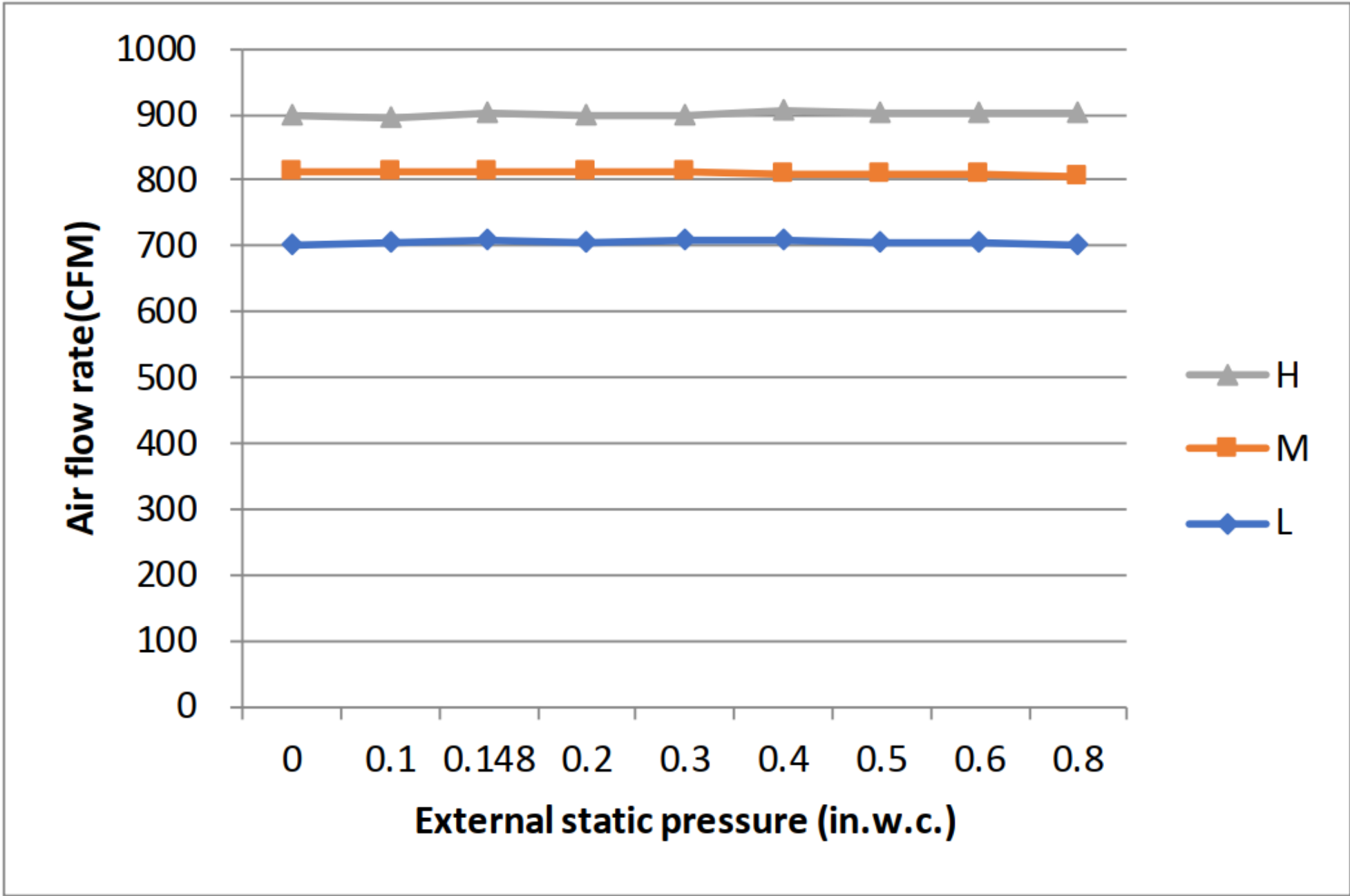


Installation Instruction For Outdoor Unit



☑ Meets all spatial requirements shown in Installation Clearance Requirements above.

Fan Performance For Indoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
 - Two way communication wired controller:120N(X6)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F*
- Chassis heater and crankcase heater equipped as standard

* For 36K model,
rated cooling
capacity/heating
capacity at -
4F=100%

SUBMITTAL DATA SHEET

innovair®

Series Name: SLIM4 Hyper Heat Pump Series
Model Number: SHV36H2BA / SAV36BDA

Air Handler 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)		1189.0 / 1083.0 / 971.2 / 865.2 / N/A
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		49/48.0/45.5/25.5/N/A
Dimension (W×D×H)	inch	21×21×49
	mm	534×534×1245
Package (W×D×H)	inch	24.41×26.57×52.56
	mm	620×675×1335
Net/Gross Weight	lbs	129.41/153.88
	kg	58.7/69.8

OUTDOOR SPECIFICATION		
Compressor Type		TWIN-ROTARY
Compressor Model		EKPQ420D1UMUA
Refrigerant		R454B
Refrigerant Oil Charge(mL)		1460
Refrigerant Oil		VG75
Outdoor Air Flow (Max) (CFM)		3001.8
Outdoor Noise Level (dBA)		62.5
Dimension (W×D×H)	inch	38.58 x 16.34 x 38.39
	mm	980.0×415.0×975.0
Package (W×D×H)	inch	45.08 x 19.68 x 42.52
	mm	1145×500×1080
Net/Gross Weight	lbs	204.15/235.23
	kg	92.6/106.7

EFFICIENCY			
Cooling		Heating	
SEER2	17.4	HSPF2-4	10.2
EER2	11.7	COP	3.60

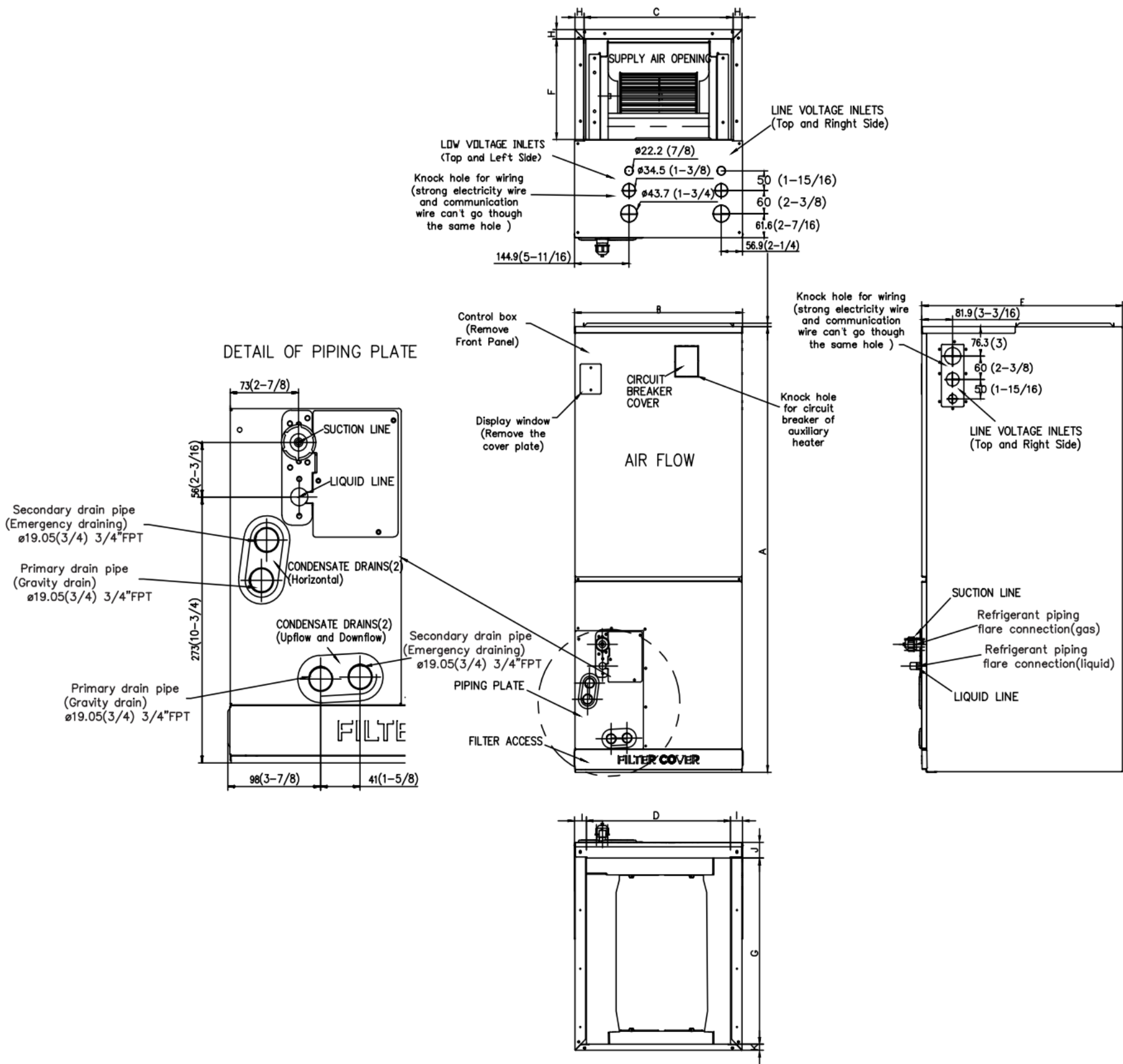
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	36000
Min/Max Capacity	9700~42000
Moisture Removal(L/h)	3.4
Standard Operating Range(°F/°C)	-22~122(-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	37000
2. @ 47°F Min/Max Capacity	11000~48000
3. @ 17°F Rated	31800
4. @ 5°F Rated: Capacity / COP	39000/1.9
5. @ 5°F Max: Capacity	39000
Standard Operating Range(°F/°C)	-22~75(-30~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

ELECTRICAL	
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	8.0/6.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	29
Outdoor MOP	30
Communication Wiring	AWG 20-2
Compressor RLA	20.5
Outdoor Fan Motor RLA	2.4
Outdoor Fan Motor W	250
Indoor Fan Motor RLA	4.5
Indoor Fan Motor W	375
System Power Input @ Cooling (W)	3076(820 ~ 4440)
System Power Input @ Heating (W)	3012(665 ~4370)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

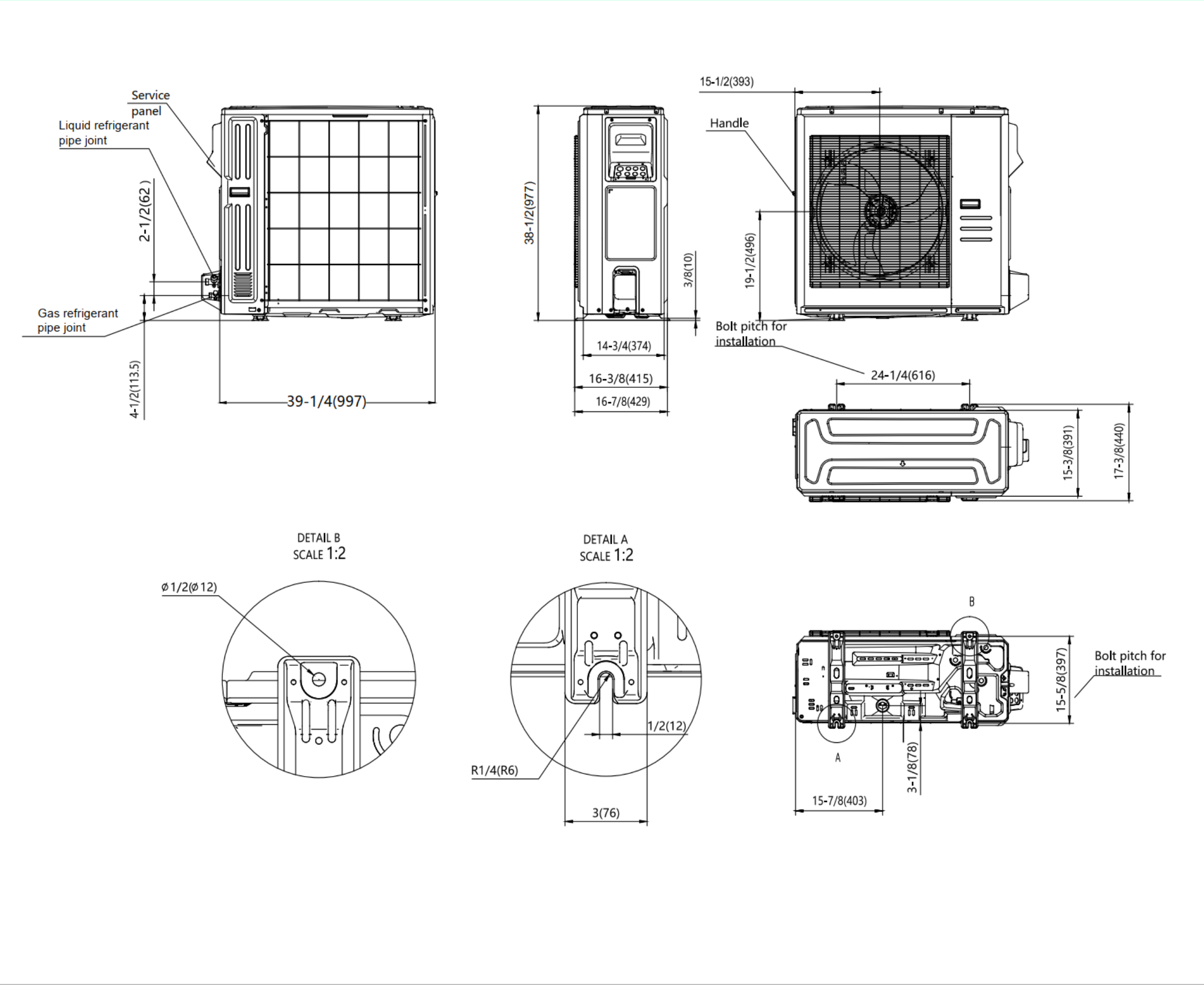
PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	246(75)
Max. Height Difference(ft/m)	98.4(30)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	126.99(3.6)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

Indoor Unit Dimension

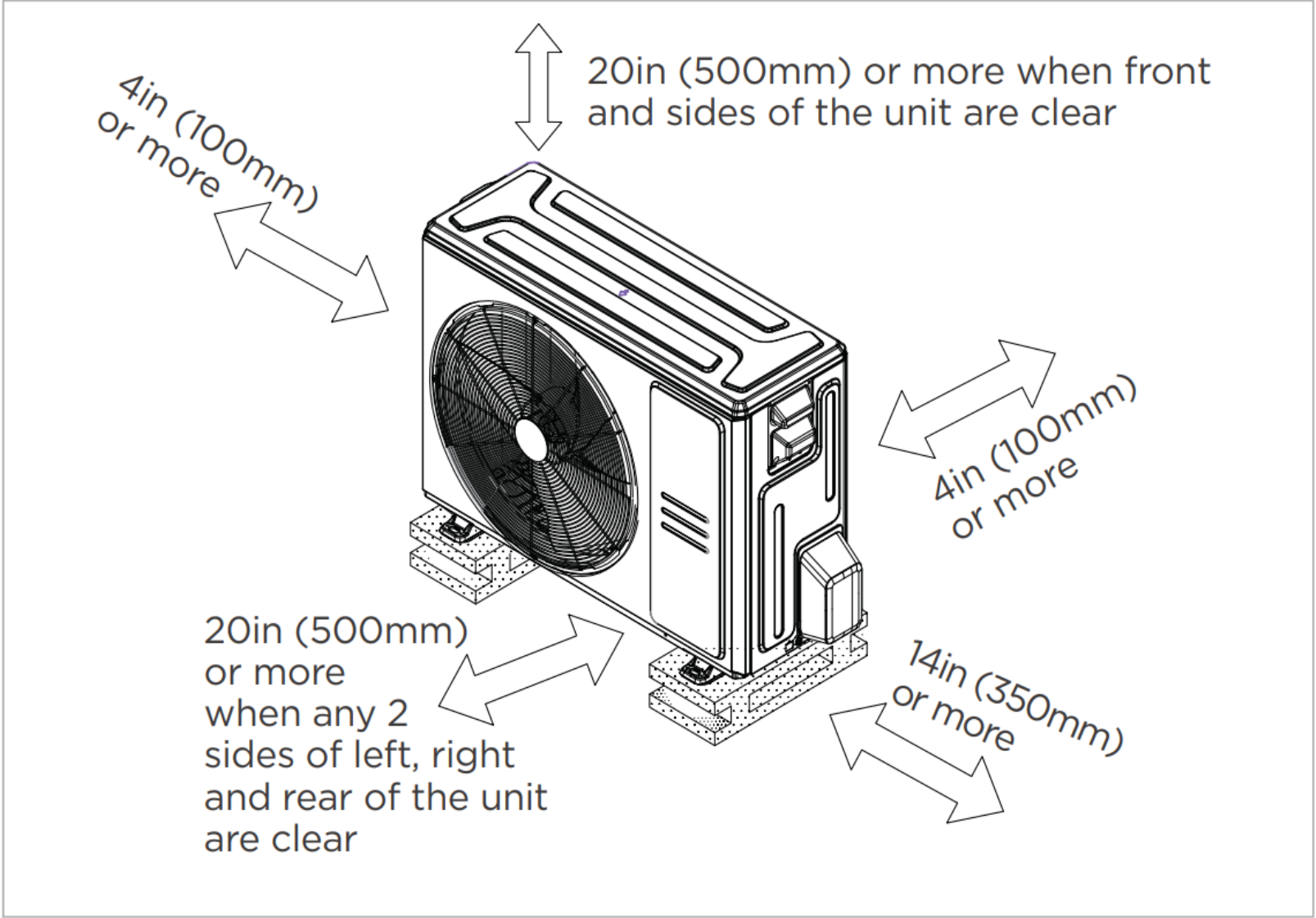


Dimensions		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
c	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	3/4	16	3/4	19

Outdoor Unit Dimension

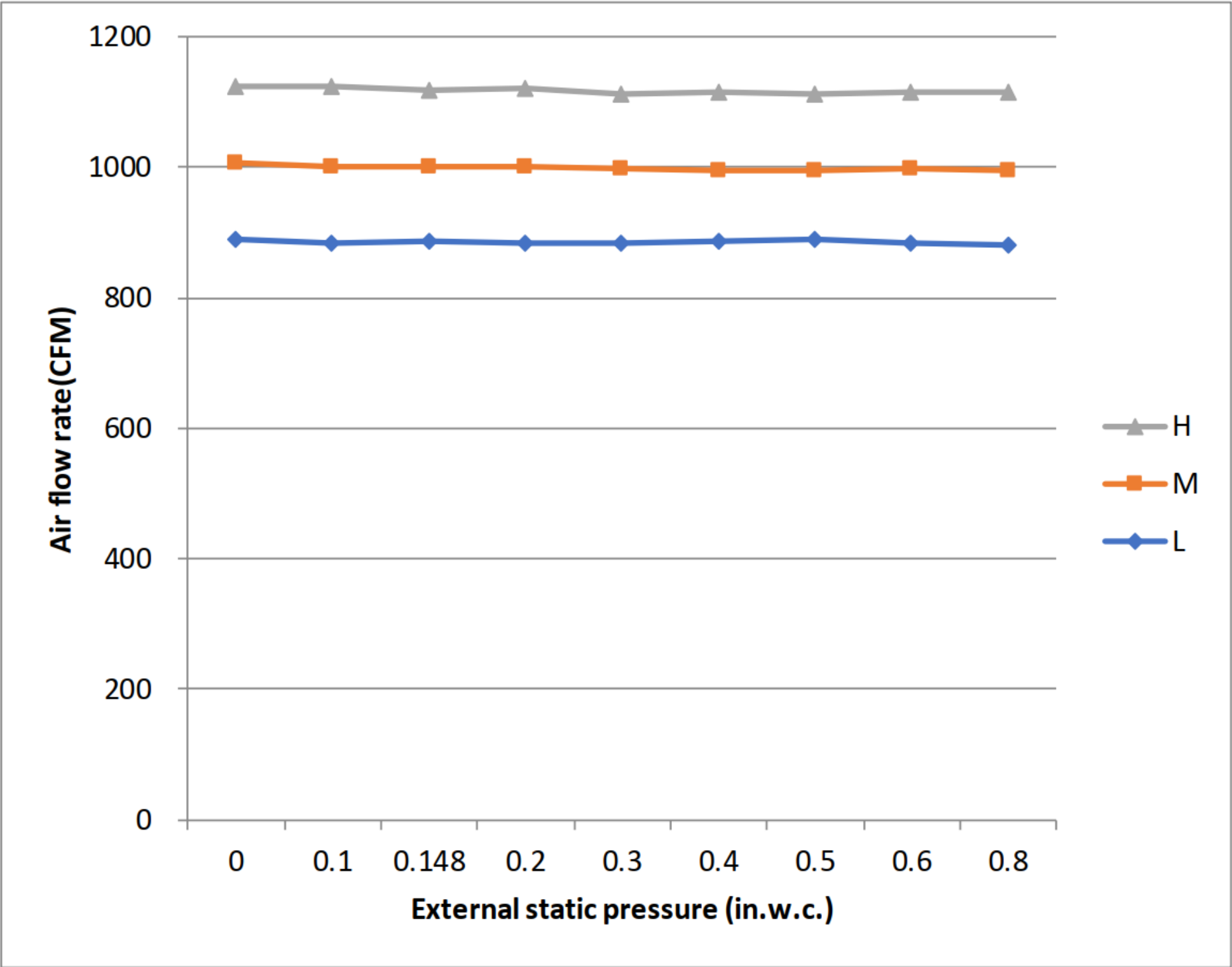


Installation Instruction For Outdoor Unit



☒ Meets all spatial requirements shown in Installation Clearance Requirements above.

Fan Performance For Indoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
 - Two way communication wired controller:120N(X6)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F*
- Chassis heater and crankcase heater equipped as standard

* For 36K model,
rated cooling
capacity/heating
capacity at -
4F=100%

SUBMITTAL DATA SHEET



Series Name: SLIM4 Hyper Heat Pump Series
Model Number: SHV48H2BA / SAV48BDA

Air Handler 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)		1601.0 / 1471.5 / 1283.1 / 1094.8 / N/A
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		N/A/52/50/34/N/A
Dimension (W×D×H)	inch	24.5×21×53
	mm	622×534×1346
Package (W×D×H)	inch	27.95×26.77×56.50
	mm	710×680×1435
Net/Gross Weight	lbs	162.92/190.92
	kg	73.9/86.6

OUTDOOR SPECIFICATION		
Compressor Type		ROTARY
Compressor Model		MTH550UKPC8FU
Refrigerant		R454B
Refrigerant Oil Charge(mL)		1800
Refrigerant Oil		HAF68D1C
Outdoor Air Flow (Max) (CFM)		3037.1
Outdoor Noise Level (dBA)		65
Dimension (W×D×H)	inch	38.58 x 16.34 x 38.39
	mm	980.0×415.0×975.0
Package (W×D×H)	inch	45.08 x 19.68 x 42.52
	mm	1145×500×1080
Net/Gross Weight	lbs	201.06/232.36
	kg	91.2/105.4

EFFICIENCY			
Cooling		Heating	
SEER2	16.5	HSPF2-4	9.5
EER2	10.5	COP	3.40

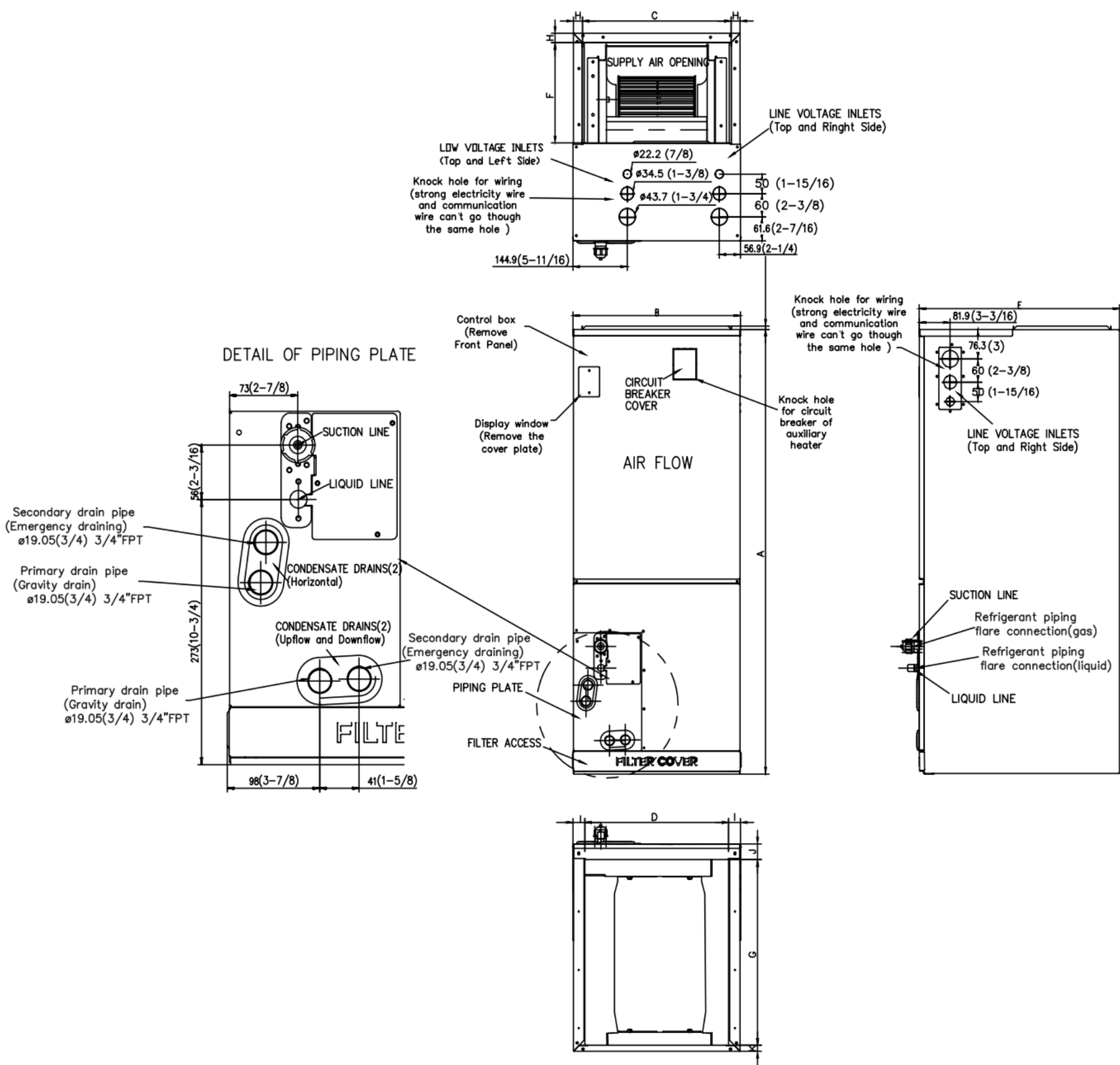
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	48000
Min/Max Capacity	15600~51000
Moisture Removal(L/h)	3.85
Standard Operating Range(°F/°C)	-22~122(-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	50000
2. @ 47°F Min/Max Capacity	15500~57300
3. @ 17°F Rated	37000
4. @ 5°F Rated: Capacity / COP	46000/1.9
5. @ 5°F Max: Capacity	46000
Standard Operating Range(°F/°C)	-22~75(-30~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

ELECTRICAL	
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	14.5/11.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	38
Outdoor MOP	40
Communication Wiring	AWG 20-2
Compressor RLA	28
Outdoor Fan Motor RLA	2
Outdoor Fan Motor W	250
Indoor Fan Motor RLA	7.8
Indoor Fan Motor W	750
System Power Input @ Cooling (W)	4690(1345 ~ 5180)
System Power Input @ Heating (W)	4750(1045 ~5200)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

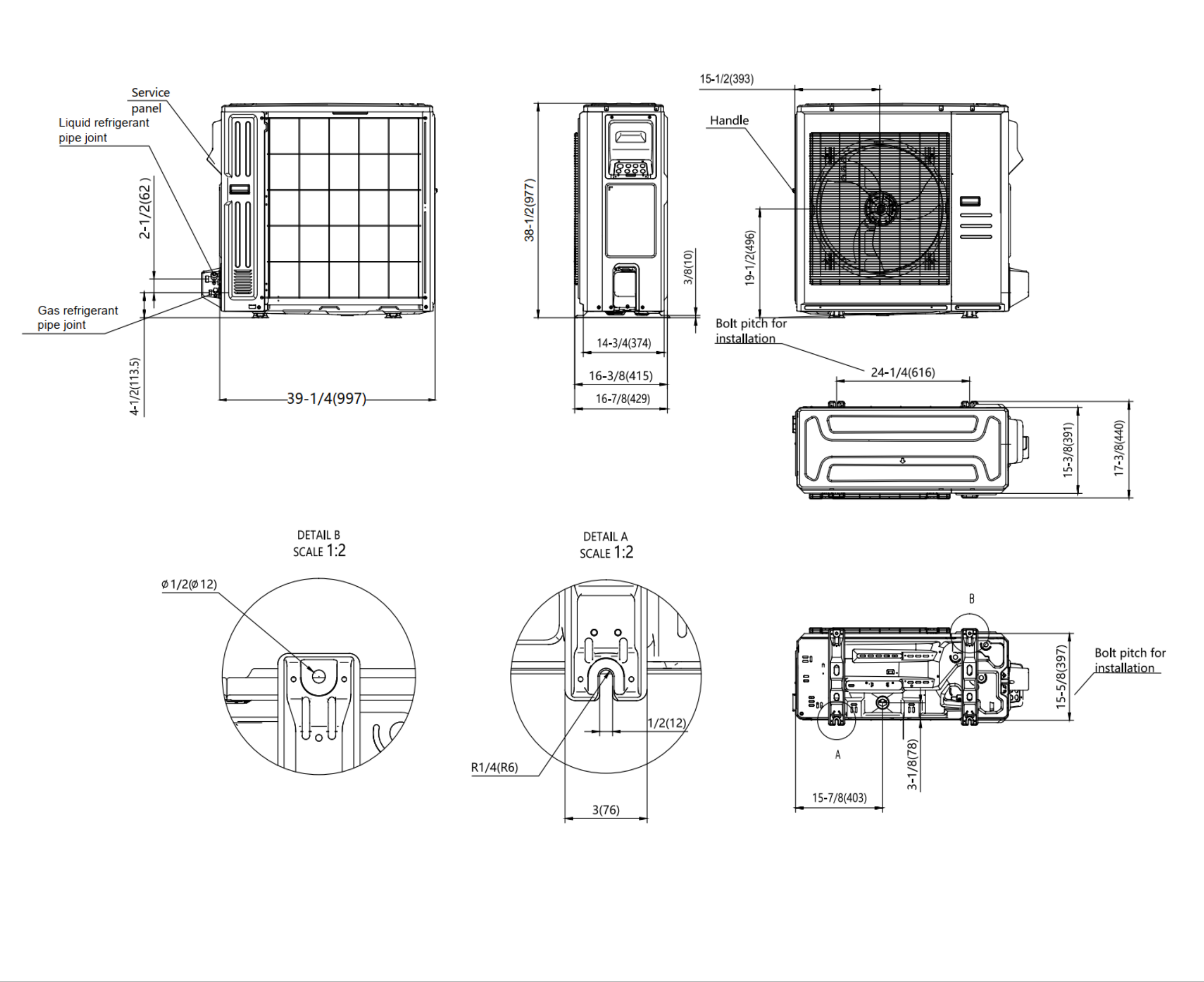
PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	246(75)
Max. Height Difference(ft/m)	98.4(30)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	134.04(3.8)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

Indoor Unit Dimension

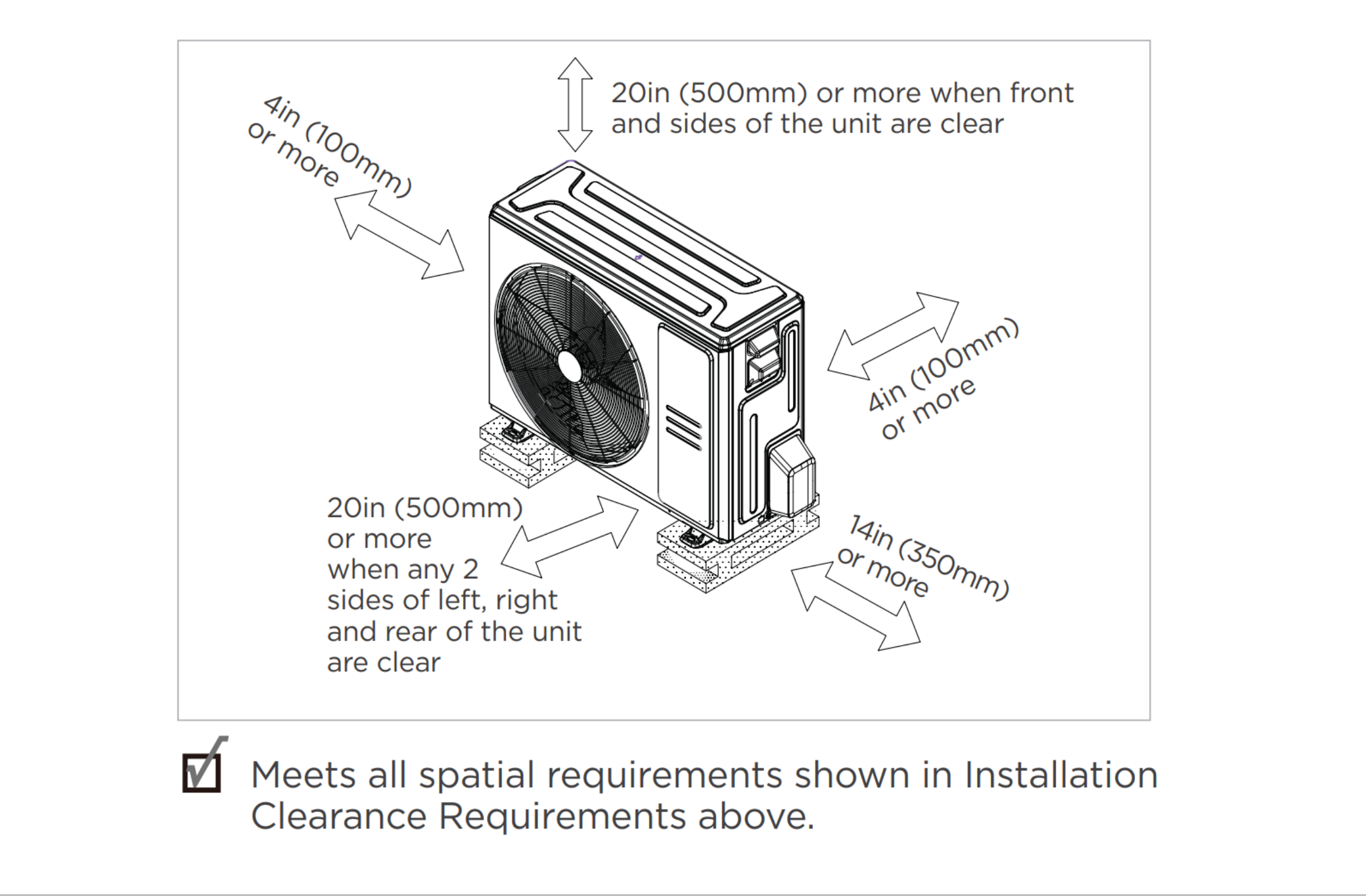


Dimensions		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
c	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	3/4	16	3/4	19

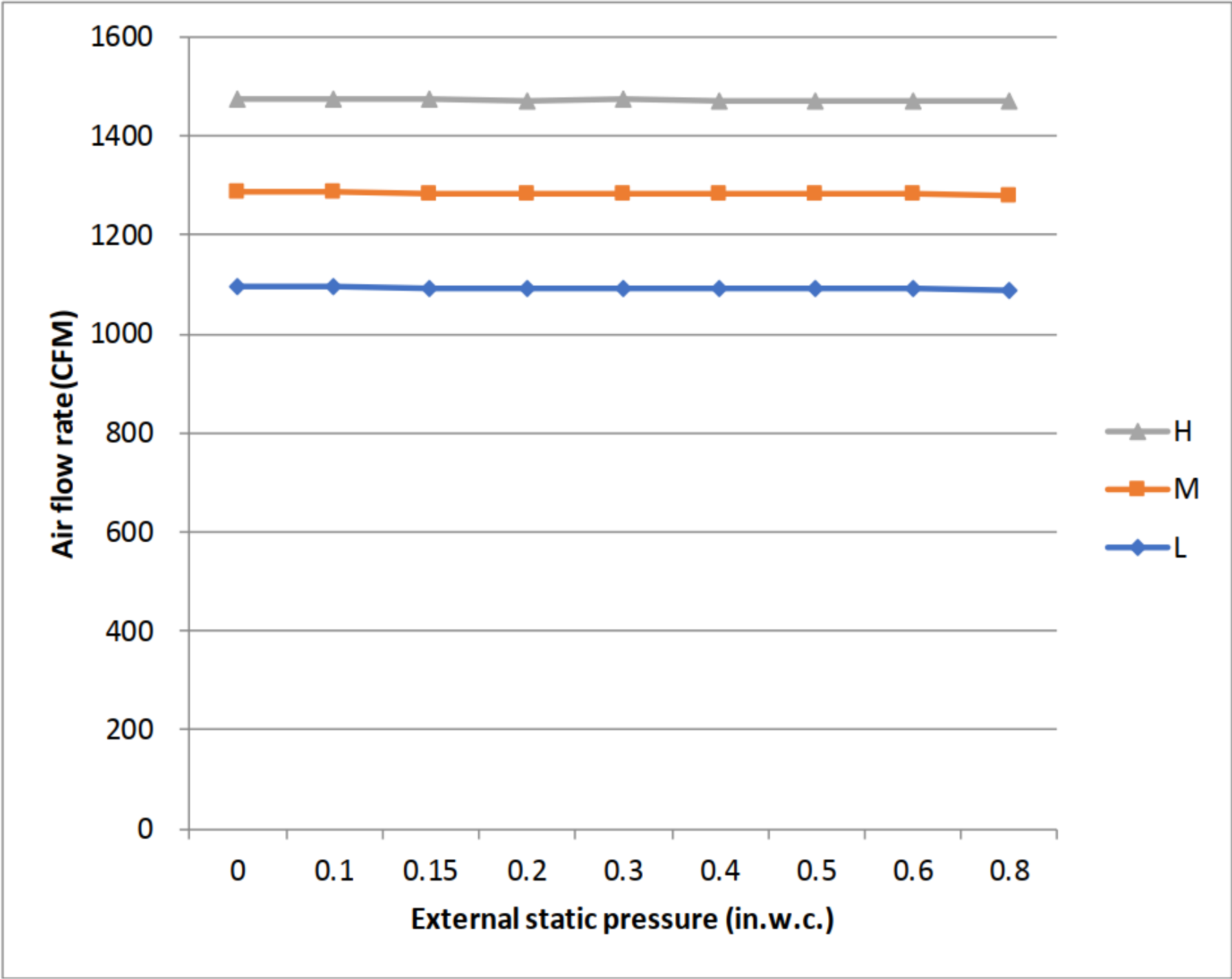
Outdoor Unit Dimension



Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
 - Two way communication wired controller:120N(X6)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F*
- Chassis heater and crankcase heater equipped as standard

* For 36K model,
rated cooling
capacity/heating
capacity at -
4F=100%

SUBMITTAL DATA SHEET



Series Name: SLIM4 Hyper Heat Pump Series
Model Number: SHV60H2BA / SAV60BDA

Air Handler 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)		1807.0 / 1583.3 / 1359.7 / 1136.0 / N/A
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		54.5/52/49.5/34.5/N/A
Dimension (W×D×H)	inch	24.5×21×53
	mm	622×534×1346
Package (W×D×H)	inch	27.95×26.77×56.50
	mm	710×680×1435
Net/Gross Weight	lbs	162.92/190.92
	kg	73.9/86.6

OUTDOOR SPECIFICATION		
Compressor Type		TWIN-ROTARY
Compressor Model		ETPQ480D66UMU1
Refrigerant		R454B
Refrigerant Oil Charge(mL)		1300
Refrigerant Oil		VG75
Outdoor Air Flow (Max) (CFM)		2648.6
Outdoor Noise Level (dBA)		65
Dimension (W×D×H)	inch	37.48 x 16.34 x 52.48
	mm	952.0×415.0×1333.0
Package (W×D×H)	inch	43.11 x 19.49 x 58.27
	mm	1095×495×1480
Net/Gross Weight	lbs	242.95/275.13
	kg	110.2/124.8

EFFICIENCY			
Cooling		Heating	
SEER2	16.0	HSPF2-4	9.0
EER2	10.0	COP	3.10

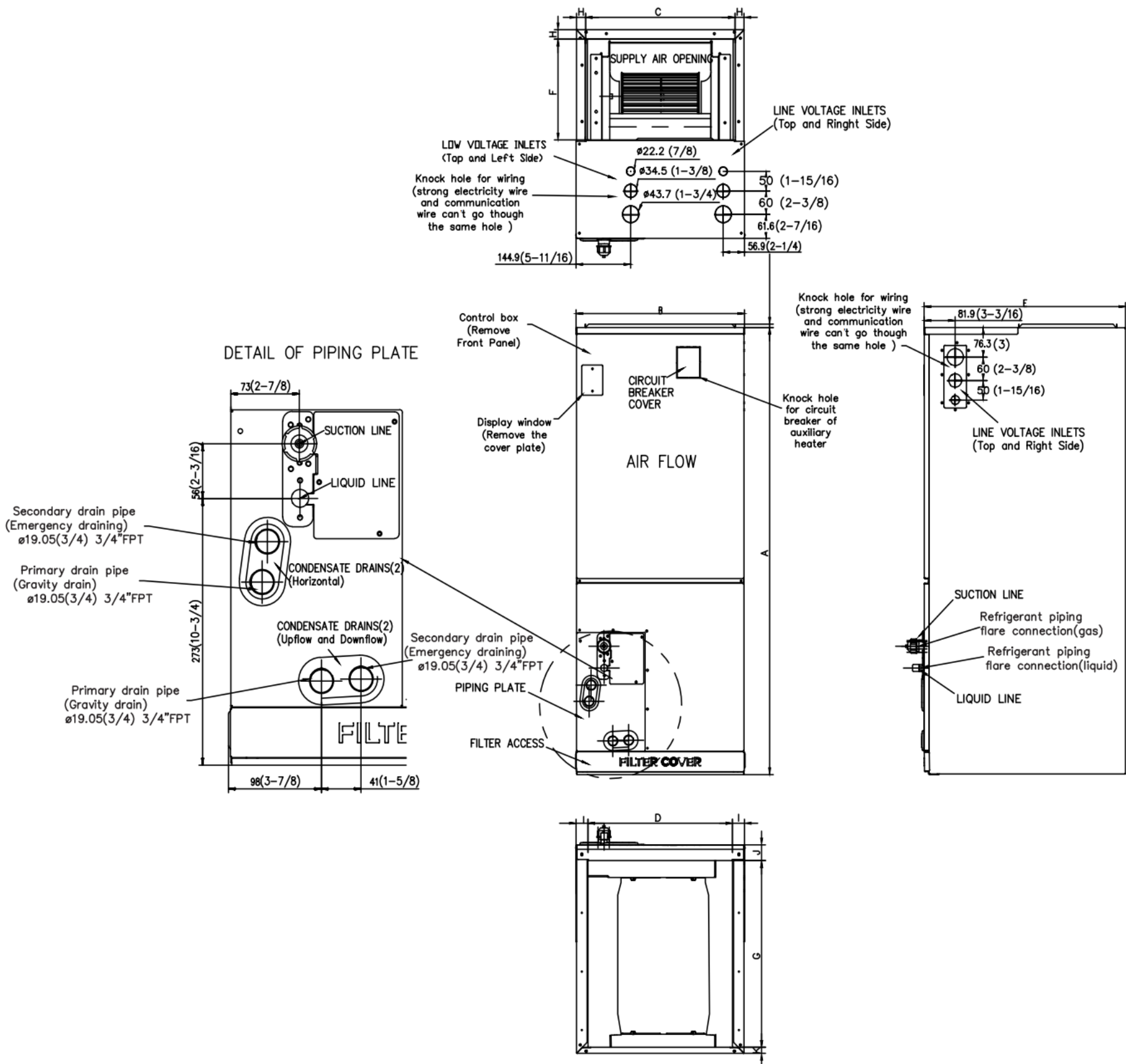
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	54000
Min/Max Capacity	11400~56300
Moisture Removal(L/h)	5.87
Standard Operating Range(°F/°C)	-22~122(-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	56000
2. @ 47°F Min/Max Capacity	8100~64500
3. @ 17°F Rated	45000
4. @ 5°F Rated: Capacity / COP	52000/1.8
5. @ 5°F Max: Capacity	52000
Standard Operating Range(°F/°C)	-22~75(-30~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

ELECTRICAL	
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	14.5/11.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	40
Outdoor MOP	40
Communication Wiring	AWG 20-2
Compressor RLA	31
Outdoor Fan Motor RLA	1.2
Outdoor Fan Motor W	85
Indoor Fan Motor RLA	8.3
Indoor Fan Motor W	750
System Power Input @ Cooling (W)	5400(1540 ~ 6430)
System Power Input @ Heating (W)	5300(725 ~5970)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

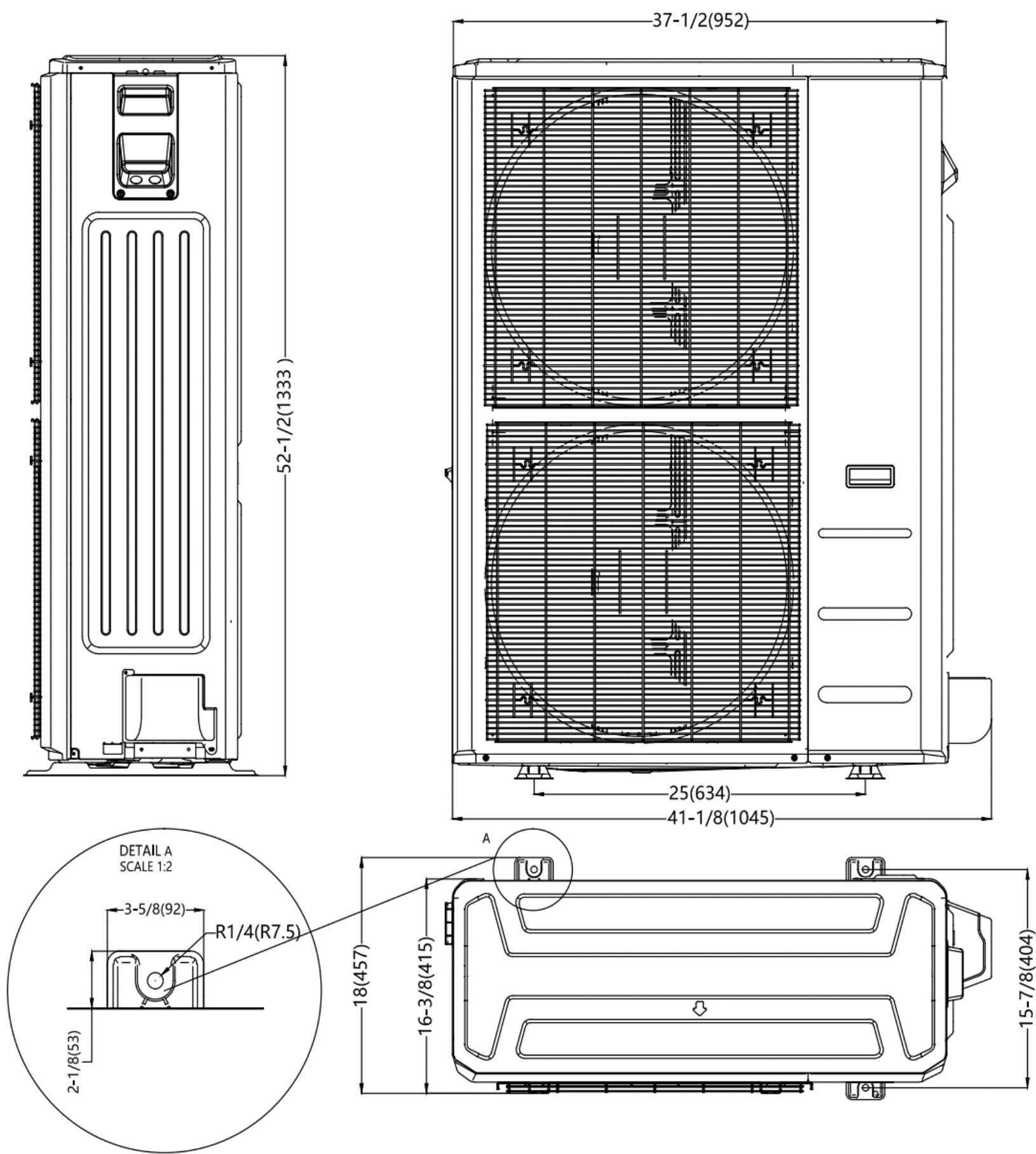
PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	246(75)
Max. Height Difference(ft/m)	98.4(30)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	183.42(5.2)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

Indoor Unit Dimension

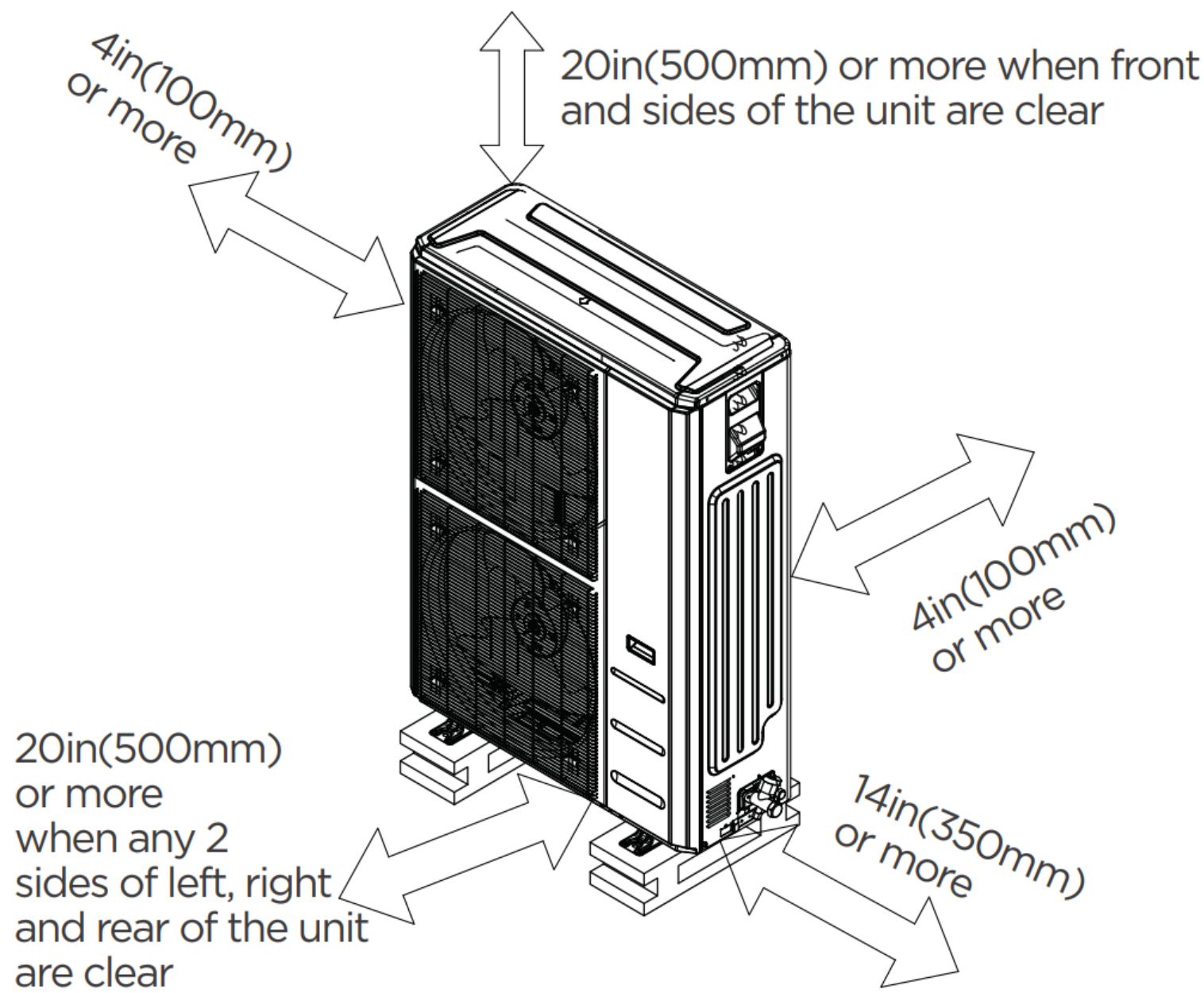


Dimensions		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
c	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	3/4	16	3/4	19

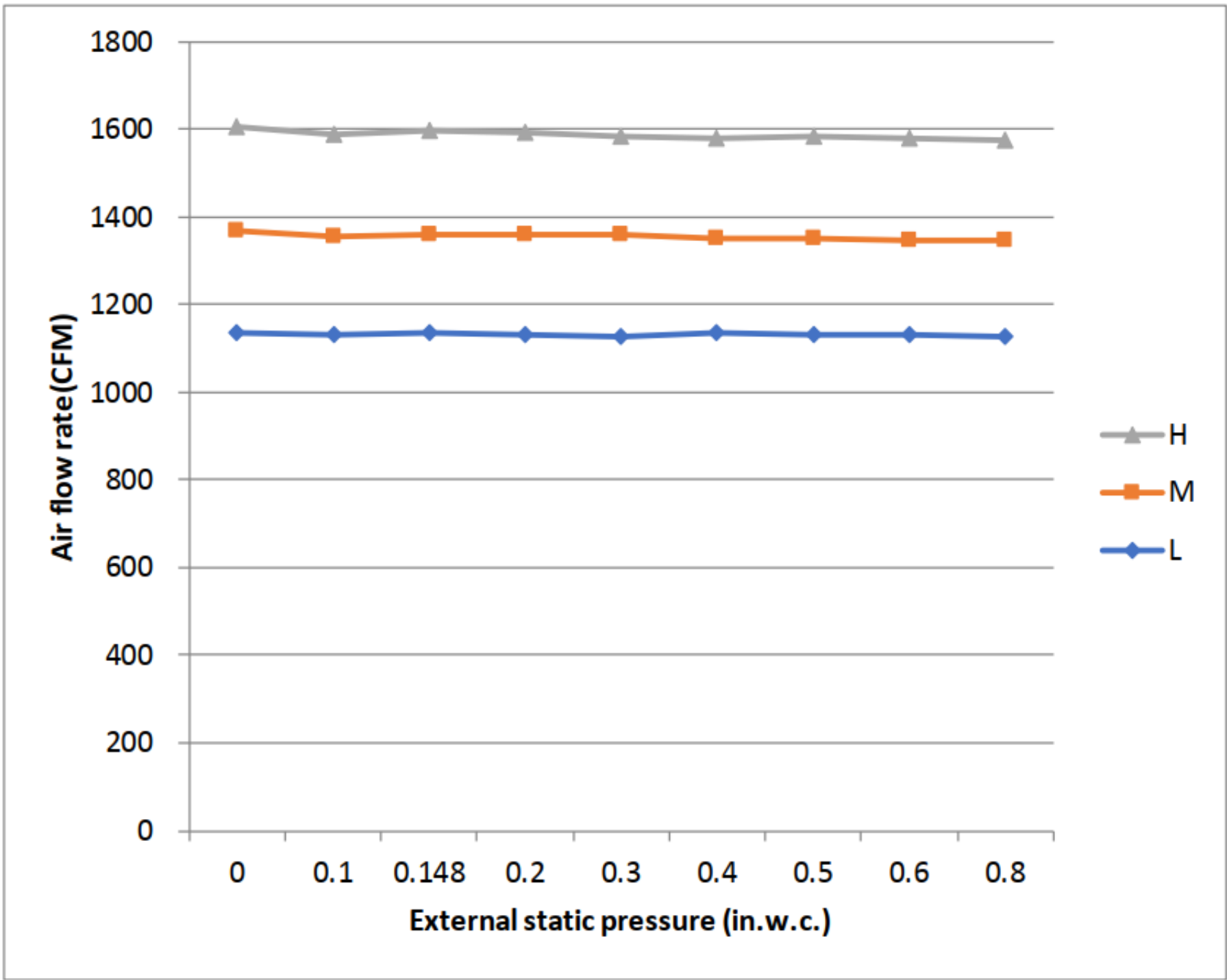
Outdoor Unit Dimension



Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
 - Two way communication wired controller:120N(X6)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F*
- Chassis heater and crankcase heater equipped as standard

* For 36K model,
rated cooling
capacity/heating
capacity at -
4F=100%