Submittal Data Sheet

Indoor Unit Model#: AC-I-42AH14
Outdoor Unit Model#: AC-I-42HP14

42K R32 Ducted Air Handler & 42K Top Discharge Heat Pump Condenser	
Location:	**Approval:**
Engineer:	**Date:**
Submitted to:	**Construction:**
Submitted by:	**Unit #:**
Reference:	**Drawing #:**

System Product Code: 810175555973
Indoor Unit Product Code: 810175555256
Outdoor Unit Product Code: 810175555904

EFFICIENCY RATINGS			
Cooling		**Heating**	
SEER2	14.3	**HSPF2-4**	7.5
EER2	11.7	**COP**	3.9

COOLING PERFORMANCE	
Cooling (Btu/hr)	
Rated Capacity	42000
Moisture Removal (L/h)	4.0
Standard Operating Range (°F/°C)	23°F ~ 125.6°F (-5°C ~ 52°C)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

HEATING PERFORMANCE	
Heating (Btu/hr)	
1. @ 47°F Rated	42000
2. @ 17°F Rated	27000
3. @ 5°F Rated: Capacity / COP	22400 / 2.8
3. @ 5°F Max: Capacity	22400
Standard Operating Range (°F/°C)	-4°F ~ 86°F (-20°C ~ 30°C)
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

FEATURES

- **Multi-position installation: horizontal (left or right), vertical (up or down)**
- **External static pressure 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 20kW**
- **Easy Maintenance**
- **Multiple control options available:**
  - **Wired controller with built-in WiFi**
  - **Third-Party 24V Thermostat**
- **Adaptive Control System**
- **Crankcase heater equipped as standard**

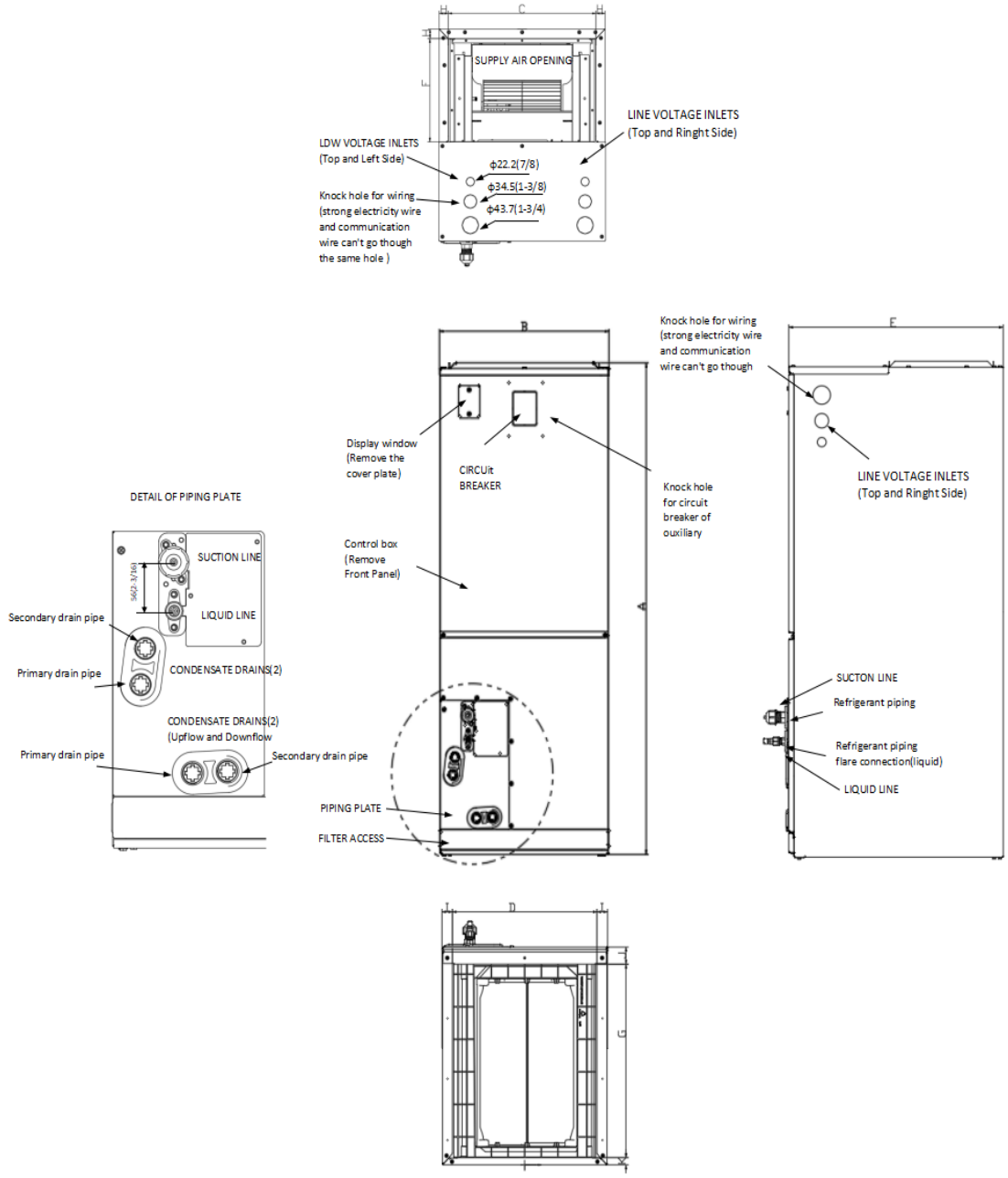
INDOOR UNIT SPECIFICATIONS		
Indoor Throttle	**Type**	Piston
Indoor Fan Airflow (Hi/Lo)	**CFM**	1100 / 750
Indoor Noise Level (Hi/Lo)	**dB(A)**	53 / 46
Unit Dimensions (W×D×H)	**in**	24.49 x 21.02 x 52.99
	mm	622 x 534 x 1346
Packing Dimensions (W×D×H)	**inch**	27.87 x 26.57 x 54.13
	mm	708 x 675 x 1375
Net Weight	**lbs**	165
	kg	75.0
Gross Weight	**lbs**	184
	kg	83.5

OUTDOOR UNIT SPECIFICATIONS		
Outdoor Throttle	**Type**	Capillary
Outdoor Fan Airflow (Max.)	**CFM**	2950
Outdoor Noise Level	**dB(A)**	60
Compressor	**Type**	Scroll
Compressor Refrigerant Oil	**Type**	VG46
Compressor Refrigerant Oil Volume	**ml**	740
Unit Dimensions (W×D×H)	**in**	29.13 x 29.13 x 32.87
	mm	740 x 740 x 835
Packing Dimensions (W×D×H)	**in**	30.32 x 30.32 x 34.06
	mm	770 x 770 x 865
Net Weight	**lbs**	176
	kg	80.0
Gross Weight	**lbs**	187
	kg	85.0

ELECTRICAL SPECIFICATIONS		
Outdoor Unit Power Supply	**V, Ph, Hz**	208/230V, 60 Hz, 1 Ph
Indoor Unit Power Supply	**V, Ph, Hz**	208/230V, 60 Hz, 1 Ph
Communication Wiring	**Type**	AWG 20x3 Shielded
ODU Minimum Circuit Ampacity (MCA)	**A**	25
ODU Max. Overcurrent Protection (Max Fuse or Breaker)	**A**	35
Cooling Operation System Power Input	**W**	3590
Heating Operation System Power Input	**W**	3160
Compressor Rated Load Amps	**A**	12.5
Outdoor Fan Motor Rated Load Amps	**A**	0.92
Outdoor Fan Motor Output	**W**	200
Indoor Fan Motor Rated Load Amps	**A**	3.48
Indoor Fan Motor Output	**W**	520

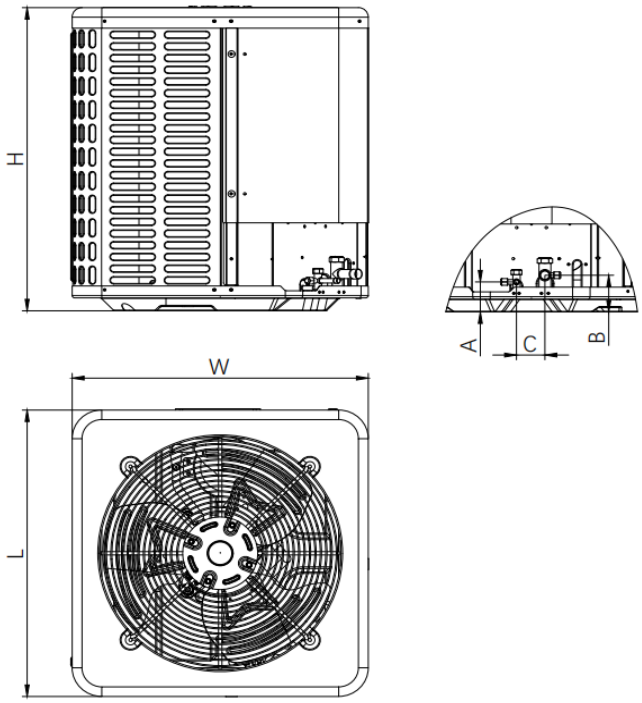
REFRIGERANT PIPING SPECIFICATIONS		
Refrigerant	**Type**	R32
Refrigerant Charge Amount (Outdoor unit pre-charged)	**oz**	98.76
	kg	2.8
Additional Charge of Refrigerant	**oz/ft**	0.52
	g/m	48
N.A. Design Pressure	**psi**	609 / 174
Liquid Side	**in**	3/8"
	mm	9.52
Gas Side	**in**	3/4"
	mm	19.00
Max. Piping Length	**ft**	164
	m	49.99
Max. Height Difference	**ft**	82
	m	24.99
Max. Pre-Charged Piping Length	**ft**	24.6
	m	7.5
Connection Method	**Type**	Flare to Braze

Indoor Unit Dimensions



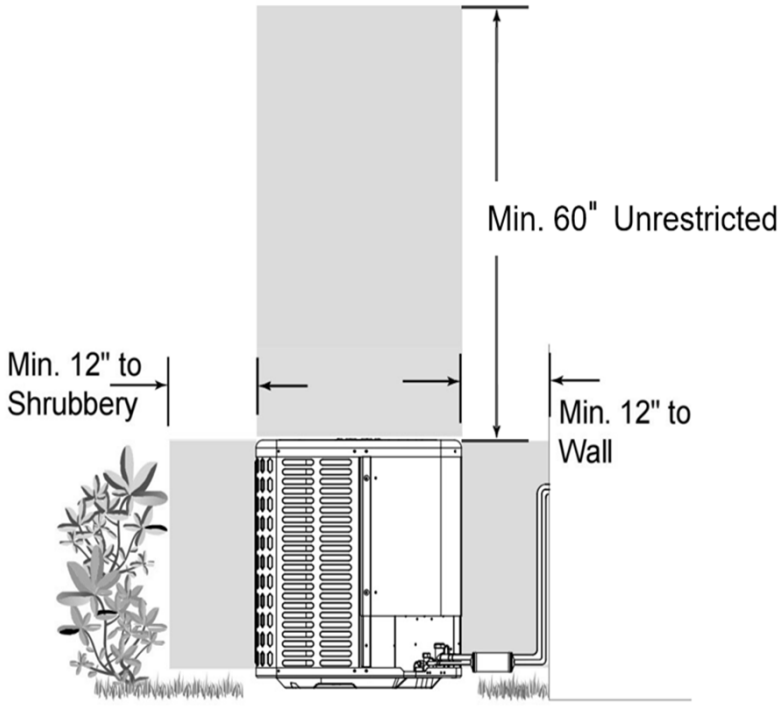
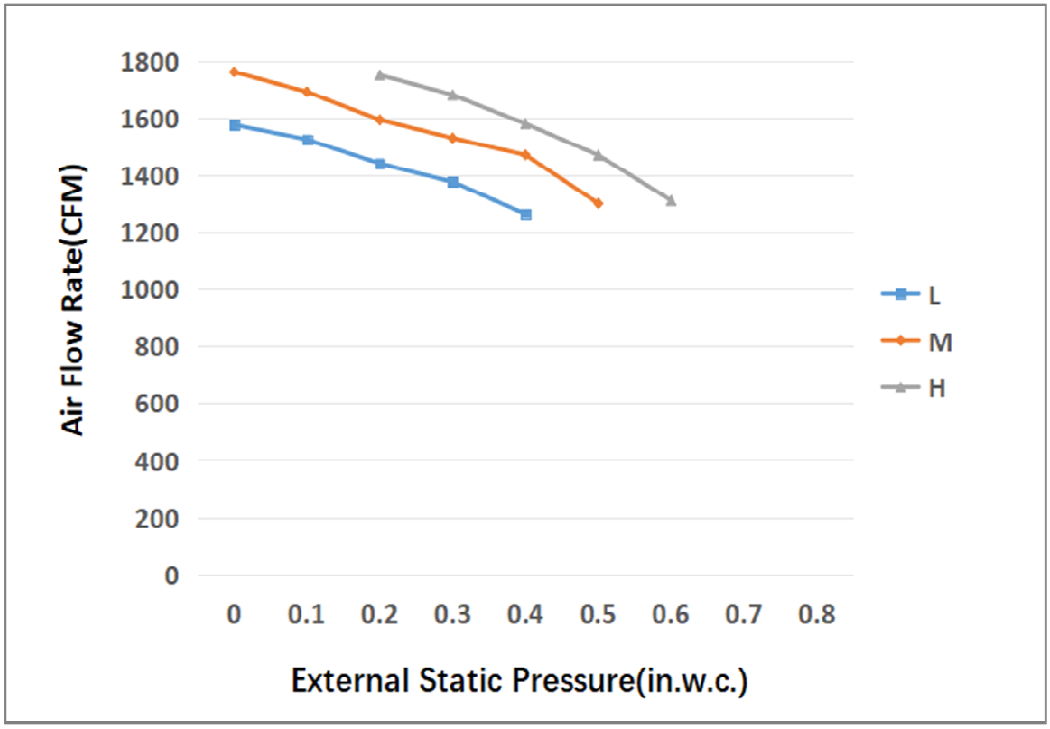
Dimensions / Model		18K/24K		30K/36K		42K/48K/60K	
		inch	mm	inch	mm	inch	mm
A	Model Height	45-3/4	1162	49-49/64	1264	53-47/64	1365
B	Model width	17-41/64	448	21-9/64	537	24-39/64	625
C	Supply Air Opening width	15-5/8	397	19-9/64	486	22-19/32	574
D	Return Air Opening Width	15-25/64	391	18-47/64	476	22-23/64	568
E	Model Depth	21-7/64	536	21-7/64	536	21-7/64	536
F	Supply Air Opening Depth	10-9/32	261	10-9/32	261	10-9/32	261
G	Return Air Opening Depth	18-23/32	475.5	18-23/32	475.5	18-23/32	475.5
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/8	28.5	1-1/8	28.5	1-1/8	28.5
J	Return Air Opening Front Clearance	1-21/32	42	1-21/32	42	1-21/32	42
K	Return Air Opening Back Clearance	45/64	18	45/64	18	45/64	18

Outdoor Unit Dimensions



Dimensions / Model		18K/24K		30K/36K		42K/48K/60K	
		inch	mm	inch	mm	inch	mm
W	Model width	23-5/8	600	29-9/64	740	29-9/64	740
L	Model length	23-5/8	600	29-9/64	740	29-9/64	740
H	Model height	25	635	25	635	32-7/8	835
A	Liquid side valve height	2-31/64	63	2-31/64	63	2-31/64	63
B	Distance between two valves	3-1/32	77	3-1/32	77	3-1/32	77
C	Gas side valve height	2-9/32	58	2-9/32	58	2-9/32	58

Outdoor Unit Installation Instructions & Clearance Requirements



Indoor Unit Fan Performance