GRANDAIRE®
Heating & Cooling Products

GRANDAIRE ADVANTAGE SERIES

WCVL24 INDOOR SPECIFICATION		
ESP(in.W.G)		0-0.8
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		44/44/42/28/28
Dimension (W×D×H)	inch	17.52 x21.02 x 45.00
	mm	445.0×534.0×1143.0
Package (W×D×H)	inch	26.57 x 20.87 x 48.62
	mm	675×530×1235
Net/Gross Weight	lbs	105.60/127.43
	kg	47.9/57.8

W5H9V24 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

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)**

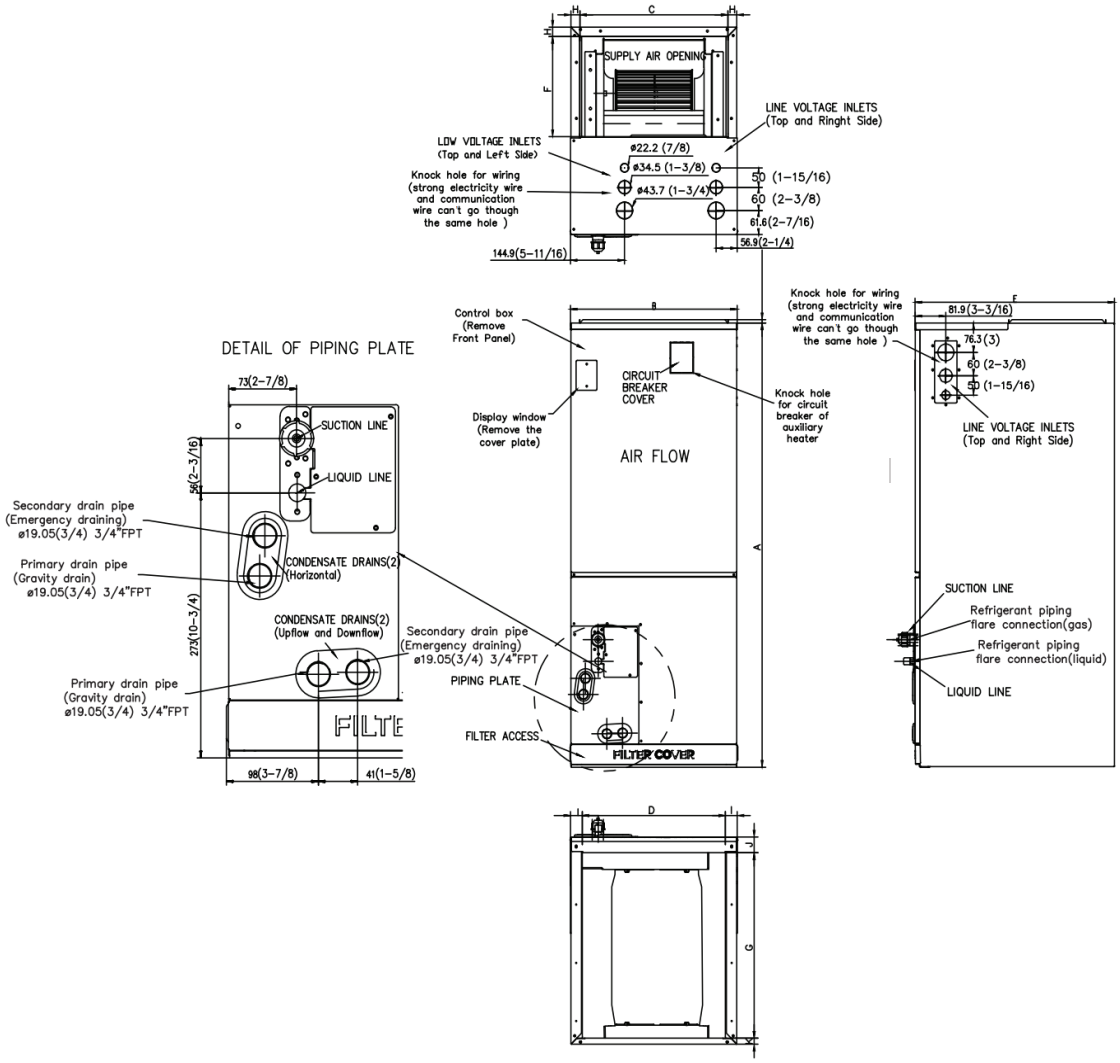
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	23000
Min/Max Capacity	7200~27000
Moisture Removal(L/h)	2.05
Standard Operating Range(°F/°C)	-22~122(-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

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

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

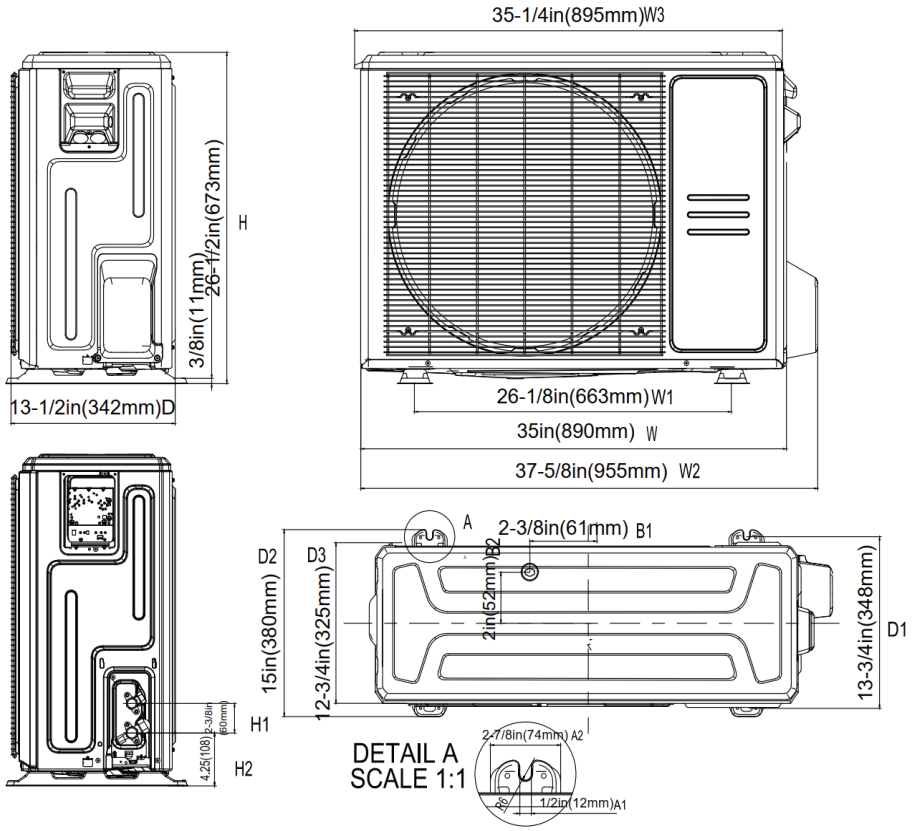
Residential Application Limited Warranty*
Seven (7) years part and one (1) year unit replacment if properly registered within ninety (90) days after original installation, parts are warranted to the original purchaser for a period of seven (7) years and one (1) year unit replacment. Otherwise, parts warranty is seven (7) years and NO unit replacment.

Indoor Unit Dimension

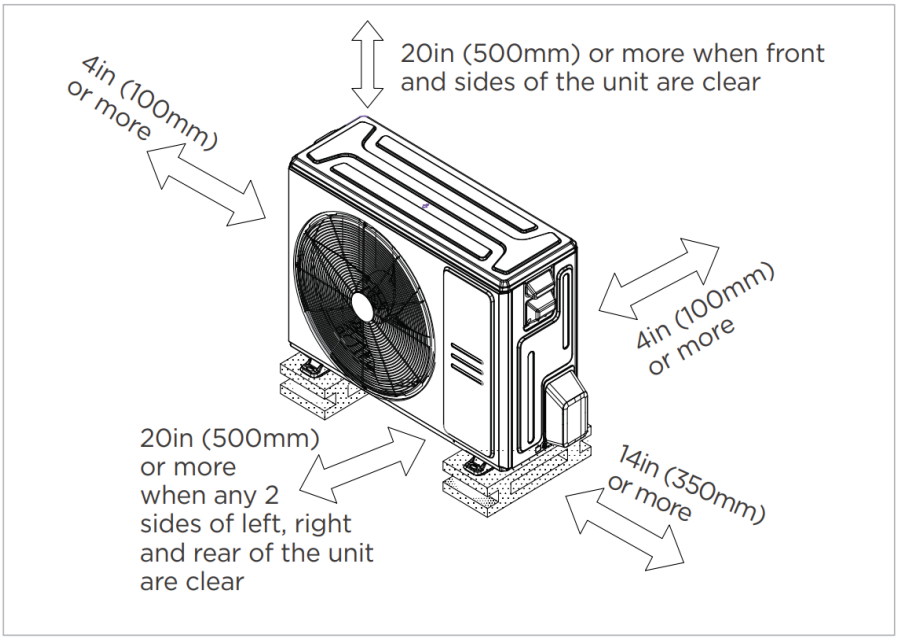


Dimensions / Model		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
C	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	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	5/8	16	3/4	19

Outdoor Unit Dimension

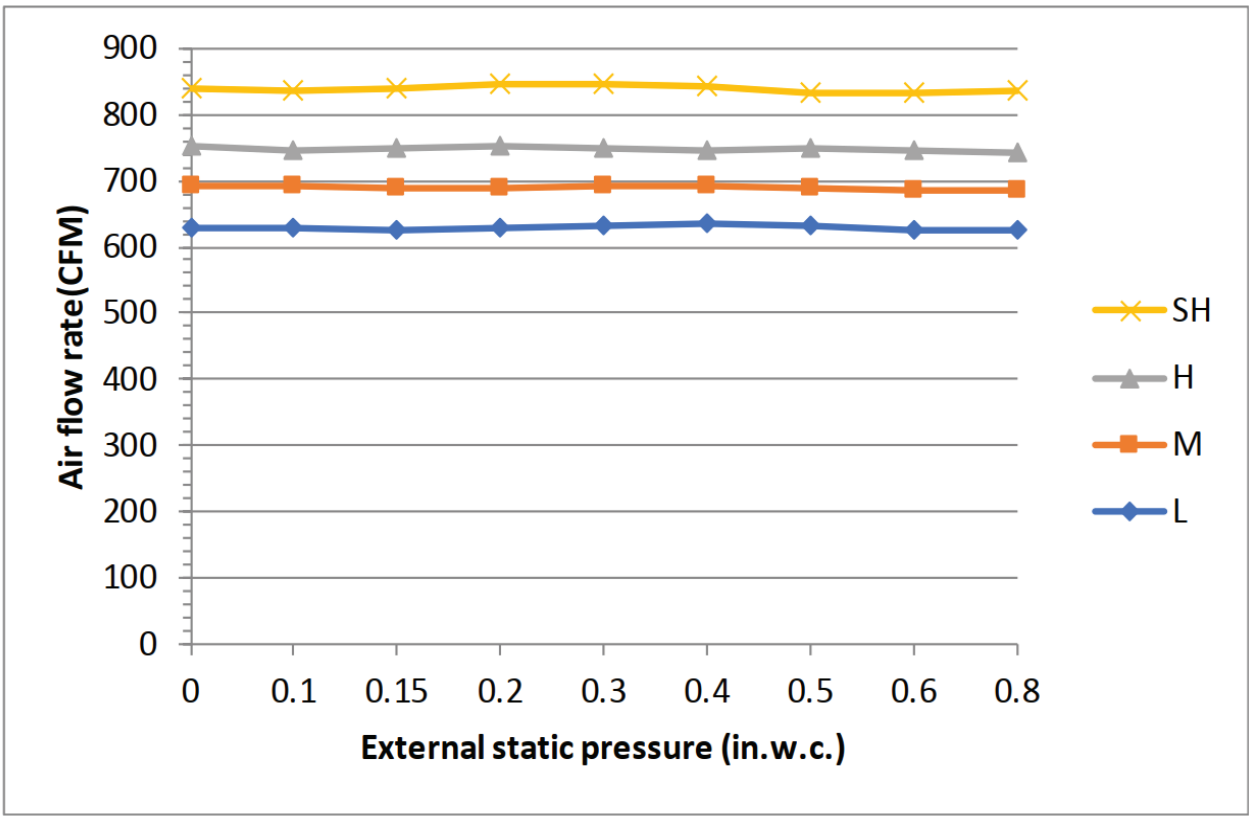


Installation Instruction For Outdoor Unit



☑ 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%