Submittal Data Sheet

Condenser Model#: AC-I-48-INV-HP-PKG

48K R32 ROOFTOP PACKAGE UNIT DC INVERTER HEAT PUMP SYSTEM	
Location:	**Approval:**
Engineer:	**Date:**
Submitted to:	**Construction:**
Submitted by:	**Unit #:**
Reference:	**Drawing #:**

Unit UPC Product Code: 810175555379

UNIT SPECIFICATIONS		
Compressor Type		DC Inverter Twin-rotary
Compressor Model		KTQ420D41SN5A1
Refrigerant Type		R32
Refrigerant Charge (oz/kg)		4.8 (169.3)
Refrigerant Oil		VG74
Refrigerant Oil Charge (mL)		1000
Outdoor Fan Motor Model		DQ-DRN-310-200-8-A
Outdoor Airflow (CFM)		4300
Indoor Fan Motor Model		DQ-ZKSD-560-10-5
Indoor Airflow (CFM)		1680
Noise level (dBA)		74
Dimension (W×D×H)	**inch**	51.57 x 44.80 x 51.42
	mm	1310 x 1138 x 1306
Package (W×D×H)	**inch**	52.28 x 45.43 x 51.65
	mm	1328 x 1154 x 1312
Net/Gross Weight	**lbs**	551 / 569
	kg	250 / 258

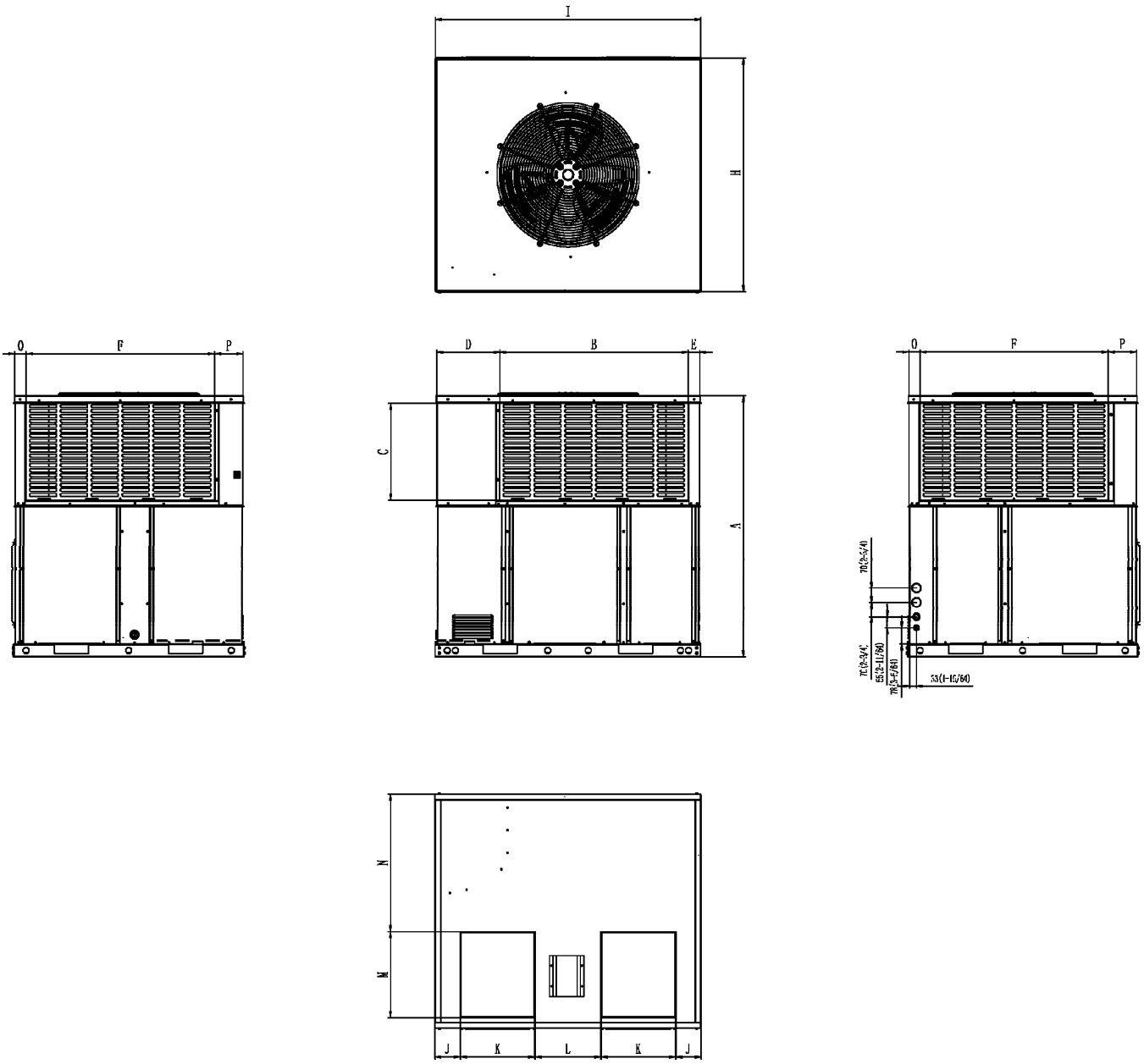
EFFICIENCY RATINGS			
Cooling		**Heating**	
SEER2	19.0	**HSPF2-4**	9.0
EER2	11.2	**COP**	12.50

ELECTRICAL SPECIFICATIONS	
Power Supply	208/230V, 60Hz, 1Ph
MCA	38.95
MAX. FUSE (MOP)	60
Communication Wiring	AWG 25×3 Shielded
Compressor RLA	23
Outdoor Fan Motor W	200
Outdoor Fan Motor RLA	2.1
Indoor Fan Motor RLA	5.4
Indoor Fan Motor W	560
System Power Input @ Cooling (W)	4286
System Power Input @ Heating (W)	3840
MCA: Min. circuit amps (A)	**MOP:** Max. Overcurrent Protection (A)
RLA: Rated load amps (A)	**W:** Fan motor rated output (W)

COOLING PERFORMANCE	
Cooling (Btu/hr)	
Rated Capacity	48000
Standard Operating Range (°F/°C)	23°F ~ 125°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)	
Rated Capacity	48000
1. @ 17°F Rated	48000
2. @ 5°F Rated: Capacity / COP	44800 (1.8)
Standard Operating Range (°F/°C)	-4°F ~ 86°F (-20°C ~ 30°C)
Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

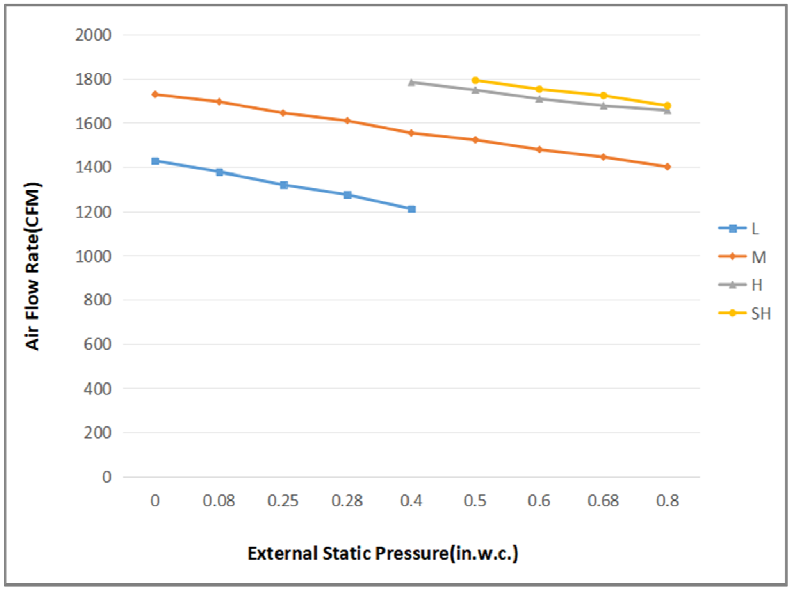
UNIT DIMENSIONS

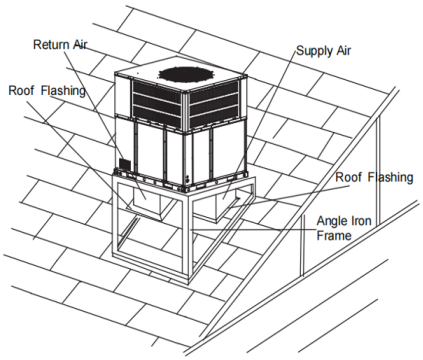
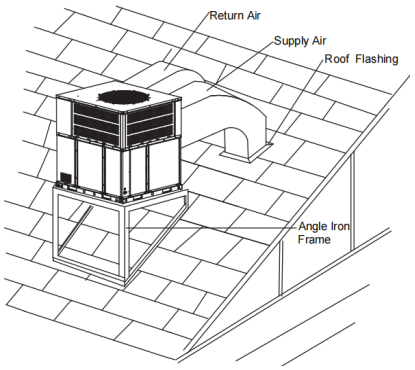


Dimensions \ Model		24K/36K		48K/60K	
		inch	mm	inch	mm
A	Model Height	46-47/64	1187	50-3/64	1271
B	Outdoor Coil Return Air Opening Width	35-3/4	906	36-17/32	928
C	Outdoor Coil Return Air Opening Height	15-7/16	392	15-7/16	392
D	Outdoor Coil Return Air Opening Side Clearance 1	12-9/16	319	12-9/16	319
E	Outdoor Coil Return Air Opening Side Clearance 2	2-31/64	63	2-51/64	71
F	Outdoor Coil Side Return Air Opening Width	24-23/32	628	36-17/32	928
H	Model Depth	35 3/64	890	44 51/64	1138
I	Model Width	50-45/64	1288	51-37/64	1310
J	Indoor Coil Return Air Opening Side Clearance	3-5/64	78	4-7/8	124
K	Indoor Coil Return? Air Opening Width	9-49/64	248	14-3/8	365
L	Indoor Coil Return Air Opening Both Clearance	21-13/16	554	12-23/32	323
M	Indoor Coil Return Air Opening Height	16-27/64	417	16-27/64	417
N	Indoor Coil Return Air Opening Top Clearance	16-11/32	415	26-11/32	669
O	Outdoor Coil Return Air Opening Back Clearance	2-33/64	64	2-31/64	63
P	Outdoor Coil Return Air Opening Front Clearance	7-51/64	198	5-25/32	147

UNIT INSTALLATION INSTRUCTIONS & CLEARANCE REQUIREMENTS

INDOOR FAN PERFORMANCE



FEATURES

- DC inverter compressor
- R32 Refrigerant, environment friendly
- Refrigerant cooling PCB, high reliablity
- Horizontal or downflow application
- Static pressure up to 0.80 In.W.G
- Optional Auxiliary heat kit up to 20kW
- Easy Maintenance
- Multiple control options available:
  - Wired controller
  - Wired controller with built-in WiFi
  - Third-Party 24V Thermostat
- Crankcase heater equipped as standard