



ENVISION™
OUTDOOR SPLIT HEAT PUMPS
R-410A Refrigerant
2-6 Ton Dual Capacity



Submittal Data
English Language/IP Units
SD1615 01/09

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

**ENVISION Residential Series
Outdoor Split: 2-6 Ton, 60Hz**



General Specifications

Extended Range Operation – Designed to operate with entering water temperatures between 20° F [-6.7 ° C] and 120 ° F [48.9 ° C].

Cabinet – Fabricated from heavy-gauge galvanized steel and finished with corrosion-resistant powder coating which meets ASTM B117 (1,000 hour salt spray). Multiple access panels.

Insulation – The interior shall be insulated with ½” thick, coated glass fiber.

Refrigerant Circuit – Sealed and fully insulated to prevent condensation. Includes compressor, TXV, reversing valve, coaxial water-to-refrigerant heat exchanger, high and low side access valves and safety controls.

Compressor – High efficiency dual capacity scroll with overload protection, mounted on vibration isolators.

Refrigerant – R-410A

Coaxial Heat Exchanger – Fully insulated convoluted copper (optional cupronickel) inner tube and steel outer tube.

Electrical – Microprocessor control, Comfort Alert, high and low pressure, low temperature safety switches, compressor relay, 24 volt, reversing valve coil, lockout circuit, control circuit board, 24 VAC control system.

Control – Field mounted 24VAC digital thermostat.

Physical Characteristics

Model	026	038	049	064	72
Compressor (1 each)	Dual Capacity Scroll				
Factory Charge R410a, oz [kg]	52 [1.47]	56 [1.59]	90 [2.55]	92 [2.61]	104 [2.95]
Coax and Water Piping					
Coax & Piping Water Volume - gal [l]	0.7 [2.6]	1.3 [4.9]	1.6 [6.1]	1.6 [6.1]	2.3 [8.7]
Weight - Operating, lb [kg]	189 [186]	236 [107]	250 [113]	271 [123]	290 [132]
Weight - Packaged, lb [kg]	209 [95]	256 [116]	270 [122]	291 [132]	310 [141]

Notes:

All units have TXV expansion devices, and 1/2" [12.2mm] & 3/4" [19.1mm] electrical knockouts.

4/9/08

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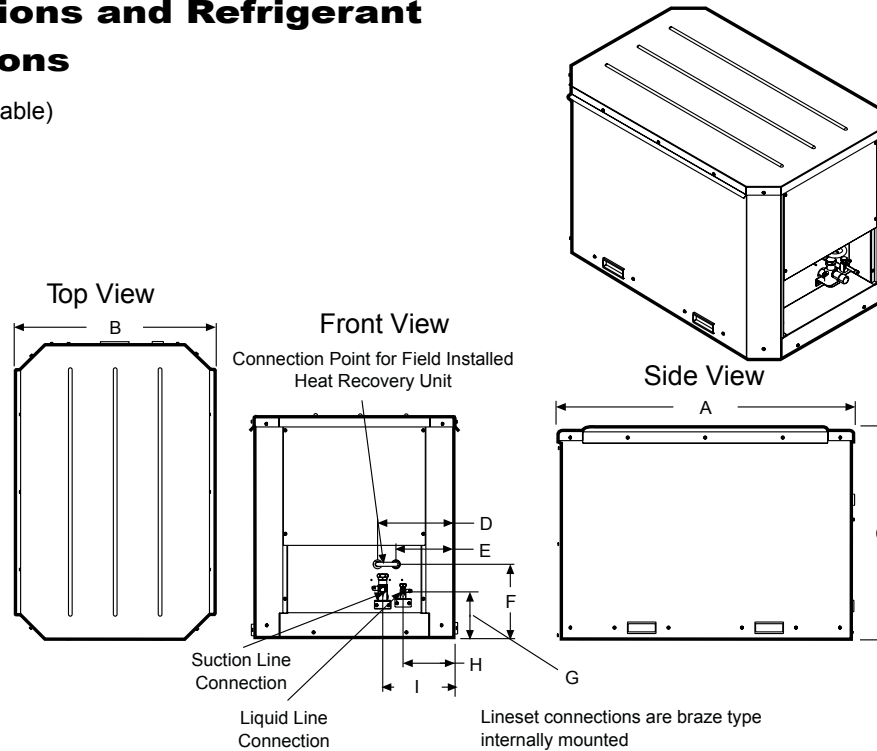
ENVISION Residential Series
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Physical Dimensions and Piping Connections

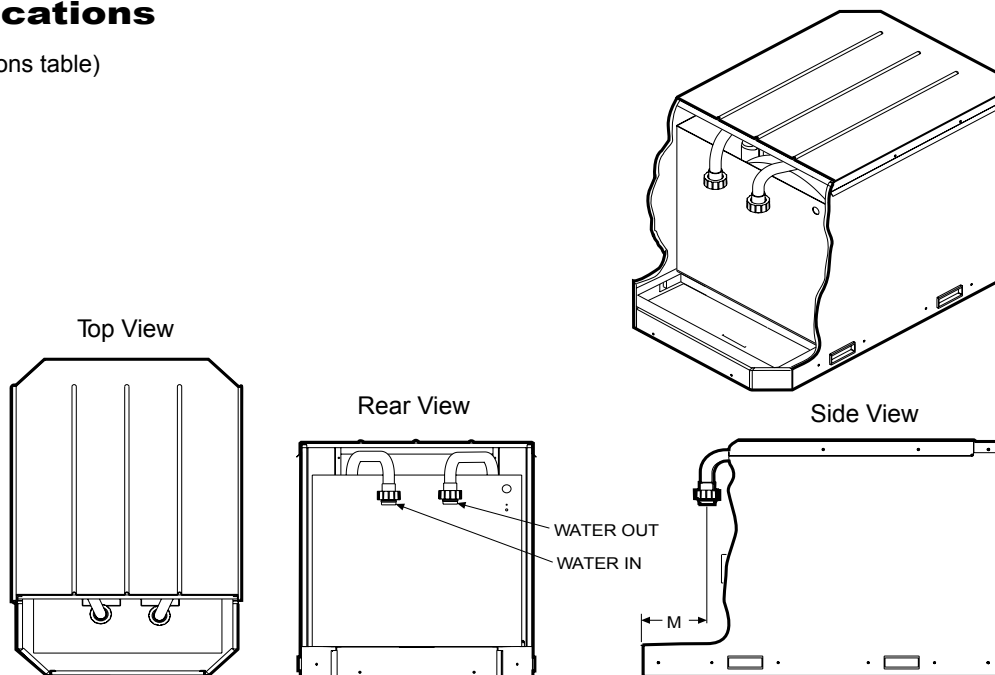
Cabinet Dimensions and Refrigerant Piping Connections

(Refer to Physical Dimensions table)



Water Line Locations

(Refer to Physical Dimensions table)



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Physical Dimensions

PHYSICAL DIMENSIONS													
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M
NS026 - NS072	36.0	23.9	25.7	9.3	7.1	9.0	5.6	8.2	10.7	18.9	8.7	14.8	7.0
	[91.4]	[60.7]	[65.2]	[23.7]	[18.0]	[22.8]	[14.2]	[20.9]	[27.2]	[48.0]	[22.1]	[37.6]	[17.8]

Notes: Refer to Physical Dimensions and Piping Connections drawings
 Inches [cm]

Physical Data

MODEL	NS026	NS038	NS046	NS064	NS070
Compressor	Copeland Ultratech Scroll				
Liquid Line Connection*	3/8" [0.95]	3/8" [0.95]	3/8" [0.95]	3/8" [0.95]	3/8" [0.95]
Suction Line Connection	5/8" [1.59]	3/4" [1.90]	3/4" [1.90]	7/8" [2.22]	7/8" [2.22]
Water Inlet/Outlet Size	GeoLink type swivel / Internal 3/4" fpt [2.54] for open loop				
Optional Heat Recovery Connection	1/2" Service Valve [1.27]				
Shipping Weight	240 [109]	287 [130]	312 [142]	354 [161]	359 [163]

Notes: * Line set connections are braze type
 Inches [cm], Pounds [Kg]

Electrical Data

Model	Rated Voltage	Voltage Min/Max	Compressor			HWA Pump FLA	Ext Loop FLA	Total Unit FLA	Min Circ Amp	Max Fuse/HACR
			MCC	RLA	LRA					
026	208-230/60/1	197/253	16.0	10.2	52.0	0.4	5.4	16.0	18.6	25
038	208-230/60/1	197/253	26.0	16.6	82.0	0.4	5.4	22.4	26.6	40
049	208-230/60/1	197/253	33.0	21.1	96.0	0.4	5.4	26.9	32.2	50
064	208-230/60/1	197/253	40.0	25.6	118.0	0.4	5.4	31.4	37.8	60
072	208-230/60/1	197/253	42.5	27.2	150.0	0.4	5.4	33.0	39.8	60

Rated Voltage of 208-230/60/1.

Rev.: 02/20/07

HACR circuit breaker in USA only.

Min/Max Voltage of 197/253.

All fuses Class RK-5.

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Pressure Drop and Recommended Flow Rates

Dual Capacity

Model	GPM	Pressure Drop (psi)				
		30°F	50°F	70°F	90°F	110°F
026 full load	4	1.4	1.3	1.2	1.1	1.0
	6	2.8	2.6	2.4	2.3	2.1
	8	4.7	4.4	4.1	3.8	3.5
	10	7.0	6.6	6.2	5.8	5.3
026 part load	3	0.8	0.7	0.7	0.7	0.6
	5	2.0	1.8	1.7	1.6	1.5
	7	3.6	3.4	3.2	3.0	2.8
	9	5.8	5.5	5.1	4.8	4.4
038 full load	5	1.2	1.2	1.1	1.0	1.0
	7	2.2	2.1	1.9	1.8	1.7
	9	3.4	3.2	3.0	2.8	2.6
	11	4.9	4.6	4.3	4	3.7
038 part load	4	0.9	0.8	0.8	0.7	0.7
	6	1.7	1.6	1.5	1.4	1.3
	8	2.8	2.6	2.5	2.3	2.1
	10	4.2	3.9	3.7	3.4	3.2
049 full load	6	1.2	1.2	1.1	1.0	1.0
	9	2.4	2.2	2.1	2.0	1.8
	12	3.9	3.6	3.4	3.2	2.9
	15	5.7	5.3	5	4.7	4.3
049 part load	5	0.9	0.9	0.8	0.8	0.7
	8	2.0	1.8	1.7	1.6	1.5
	11	3.4	3.1	2.9	2.8	2.5
	14	5.0	4.7	4.4	4.1	3.8
064 full load	8	1.8	1.7	1.6	1.4	1.3
	12	3.8	3.5	3.3	3.0	2.8
	16	6.5	6.0	5.6	5.2	4.8
	20	9.7	9.1	8.5	8.0	7.4
064 part load	6	1.0	0.9	0.9	0.8	0.8
	10	2.6	2.5	2.3	2.1	2.0
	14	5.0	4.7	4.4	4.1	3.8
	18	8.1	7.6	7.1	6.6	6.1
072 full load	12	3.2	3.0	2.8	2.6	2.4
	15	4.5	4.2	4.0	3.7	3.4
	18	6.0	5.7	5.3	4.9	4.6
	21	7.8	7.3	6.8	6.4	5.9
072 part load	10	2.3	2.1	2.0	1.9	1.7
	13	3.6	3.3	3.0	2.8	2.6
	16	5.0	4.6	4.3	4.0	3.7
	19	6.5	6.2	5.8	5.4	5.0

5/30/06

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