

VXP-Series



Enjoy the ultimate in comfort and efficiency with the VXP-Series extreme performance air source heat pump. With an inverter-driven compressor, the VXP-system fully modulates to use the least amount of energy possible to maintain temperature, while at the same time optimizing sound levels and comfort. Hyper heat performance down to -22°F (-30°C) and cooling to an extreme 122°F (50°C) means the heat pump has world-class operating parameters in all weather conditions. Available with auxiliary heat kits for the VXP air handler, or with the optional MXP-Series of cased coils for dual-fuel capabilities with any new or existing furnace.

FEATURES

- Aluminum-alloy traditional fin-and-tube coil construction for maximum durability and corrosion resistance
- Efficient and quiet ECM blower motor
- Accepts traditional 24VAC thermostats for convenience and advanced control options
- Wired programmable control included
- Optional electric resistance heat kits (up to 25kW) provides auxiliary heat source for comfort during the worst conditions
- Beautiful and durable gloss enameled-steel construction with insulated construction provides less than 2% cabinet leakage
- Built-in return filter rack:
18K & 24K = 16"x 20"x 1"
30-48K = 20"x 20"x 1"
60K = 24"x 20"x 1"
- Multi-position air handler



Wired programmable control



Comfort-Aire®

EXTREME PERFORMANCE HEAT PUMP

1.5 to 5 Tons

*Six models to choose from
18,000 to 60,000 BTUH*

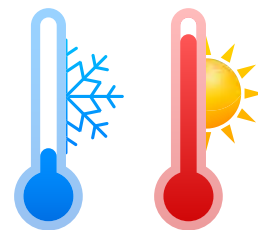


COOLING

-22°F (-30°C) – 122°F (50°C)

HEATING

-22°F (-30°C) – 75°F (24°C)



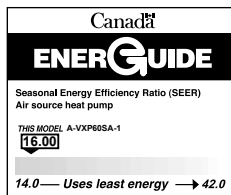
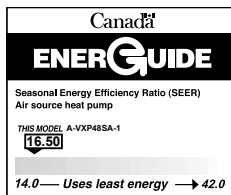
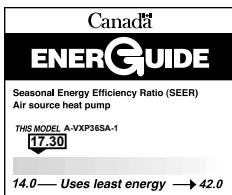
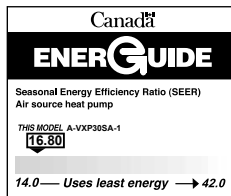
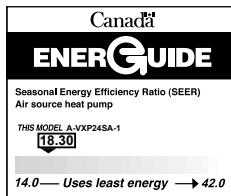
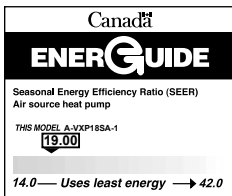
Warranty—10 years on compressor, 10 years on parts
(Some limitations apply; see printed warranty for details.)

www.comfort-aire.com

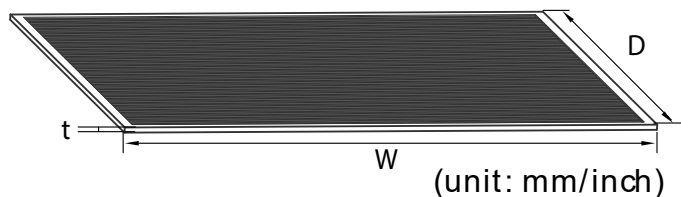
MULTI-POSITION AIR HANDLER

Ducted Units								
FEATURES			B-VXP18SA-1	B-VXP24SA-1	B-VXP30SA-1	B-VXP36SA-1	B-VXP48SA-1	B-VXP60SA-1
Power supply	Rated	V, Ph, Hz	115/208/230V, 60Hz, 1ph	115/208/230V, 60Hz, 1ph	115/208/230V, 60Hz, 1ph	115/208/230V, 60Hz, 1ph	115/208/230V, 60Hz, 1ph	115/208/230V, 60Hz, 1ph
	Voltage range	V	187-253	187-253	187-253	187-253	187-253	187-253
Cooling	Rated Capacity (range)	Btu/h	18,000 (5,660~22,000)	23,000 (7,200~27,000)	30,000 (12,800~39,000)	36,000 (9,700~42,000)	48,000 (15,600~51,000)	54,000 (11,400~56,300)
	Input power	W	1,445	1,965	2,567	3,076	4,690	5,400
	Rated current	A	6.6	9	11.4	13.4	20	23.3
	EER2	Btu/w	12.5	11.7	11.7	11.7	10.5	10
	SEER2	Btu/w	19	18.3	16.8	17.4	16.5	16
Heating at 47°	Rated Capacity (range)	Btu/h	19,000 (6,000~22,000)	24,000 (9,100~30,000)	34,000 (10,300~38,500)	39,000 (11,000~48,000)	50,000 (15,500~57,300)	56,000 (8,100~64,500)
	Input power	W	1,740	2,112	2,790	3,012	4,750	5,300
	Rated current	A	7.6	9.5	12.4	13.1	20.5	23.1
	COP	W/W	3.2	3.33	3.65	3.6	3.4	3.1
	HSPF4 2	Btu/w	9.7	10	10	10.2	9.5	9
	HSPF5	Btu/w	8	8	8.3	8.6	8	8
Heating at 5° (-15°)	Capacity	Btu/h	18,000	21,600	32,600	39,000	46,00	52,000
	COP	W/W	2.0	1.87	1.96	1.9	1.9	1.8
MINIMUM CIRCUIT AMPACITY (Indoor unit)		A	5.5/4.0	5.5/4.0	8.0/6.0	8.0/6.0	14.5/11.0	14.5/11.0
MAX. FUSE (Indoor unit)		A	15	15	15	15	15	15
Indoor air flow (Hi/Mi/Lo)		CFM	577/530/489	760/695/630	895/807/713	1083/972/866	1472/1284/1095	1584/1360/1136
Indoor noise level (Hi/Mi/Lo)		dB(A)	41/39/33	44/42/28	46/43/27.5	48/45.5/25.5	52/50/34	52/50/34
Indoor unit	Dimension (W×D×H)	inch	21.02x17.52x45.00	21.02x17.52x45.00	21.02x21.02x49.02	21.02x21.02x49.02	21.02x24.49x52.99	21.02x24.49x52.99
	Packing (W×D×H)	inch	26.57x20.87x48.62	26.57x20.87x48.62	26.57x24.41x52.56	26.57x24.41x52.56	27.95x26.77x56.50	27.95x26.77x56.50
	Net/Gross weight	lbs.	105.82/176.76	105.60/127.43	128.97/153.44	129.41/153.88	162.92/190.92	162.92/190.92
Refrigerant piping	Liquid side/ Gas side	inch	3/8" / 3/4"	3/8" / 3/4"	3/8" / 3/4"	3/8" / 3/4"	3/8" / 3/4"	3/8" x 3/4"
Drainage water pipe diameter		inch	3/4	3/4	3/4	3/4	3/4	3/4
Thermostat type	Wireless remote controller		Standard	Standard	Standard	Standard	Standard	Standard
	Programmable wifi wired controller		Standard	Standard	Standard	Standard	Standard	Standard

Model Size Selection							
Model (Btu/h)	3kW	5kW	8kW	10kW	15kW	20kW	25kW
8K	Yes	Yes	Yes	Yes	-	-	-
24K		Yes	Yes	Yes	Yes	-	-
30K		Yes	Yes	Yes	Yes	-	-
36K		Yes	Yes	Yes	Yes	Yes	-
48K			Yes	Yes	Yes	Yes	-
60K			-	Yes	Yes	Yes	Yes



Recommended Size of Filter



(unit: mm/inch)

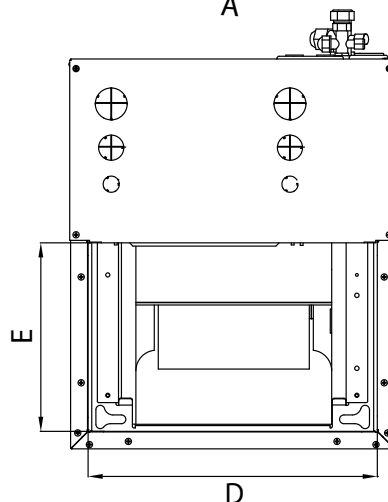
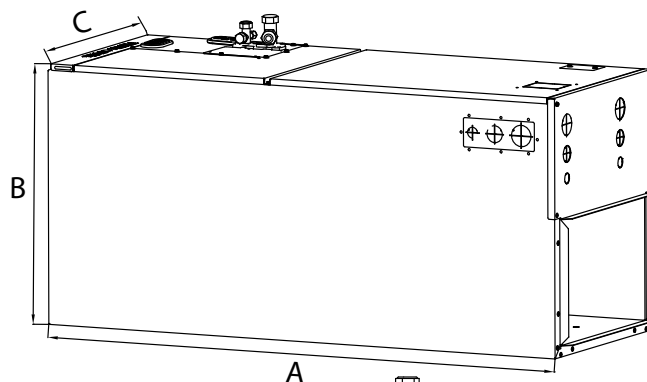
Model (Btu/h)	W		D		T	
	mm	inch	mm	inch	mm	inch
18K	406.4	16	508	20	25.4	1
24K	406.4	16	508	20	25.4	1
30&36K	495.3	19-1/2	508	20	25.4	1
48&60K	584.2	23	508	20	25.4	1

Dimensional Data

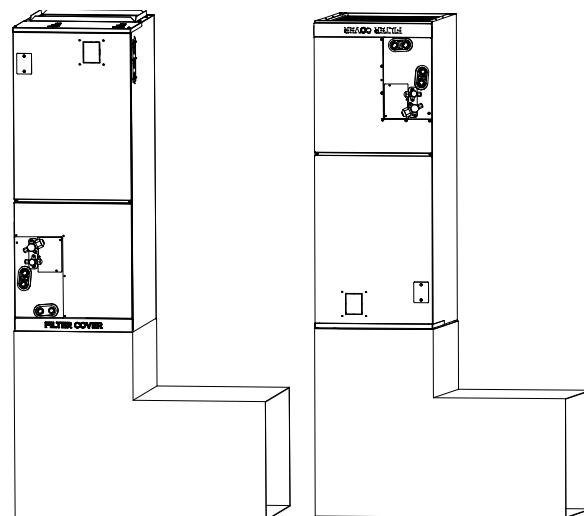
(unit: mm/inch)

Model (Btu/h)	Dimensions	18-24K	30-36K	48K	60K
Length of A	inch	49	53	57	57
Length of B	inch	21	25	27	27
Length of C	inch	17-1/2	21	24-1/2	24-1/2
Length of D	inch	15-3/4	19	22-1/2	22-1/2
Length of E	inch	10-1/4	10-1/4	10-1/4	10-1/4

DIMENSIONAL DRAWINGS

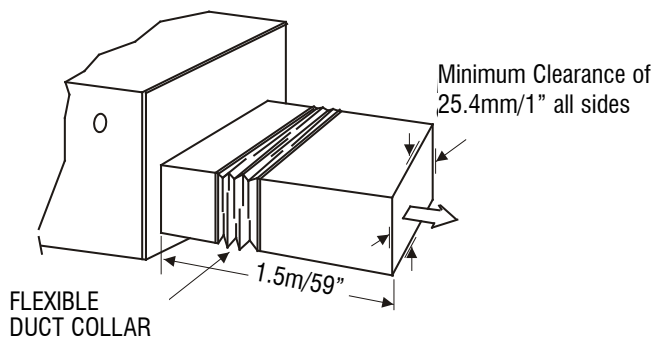


Vertical Installations



Horizontal Installations

Plenum Clearances



The outlet side pipe length is 1.5m/59".

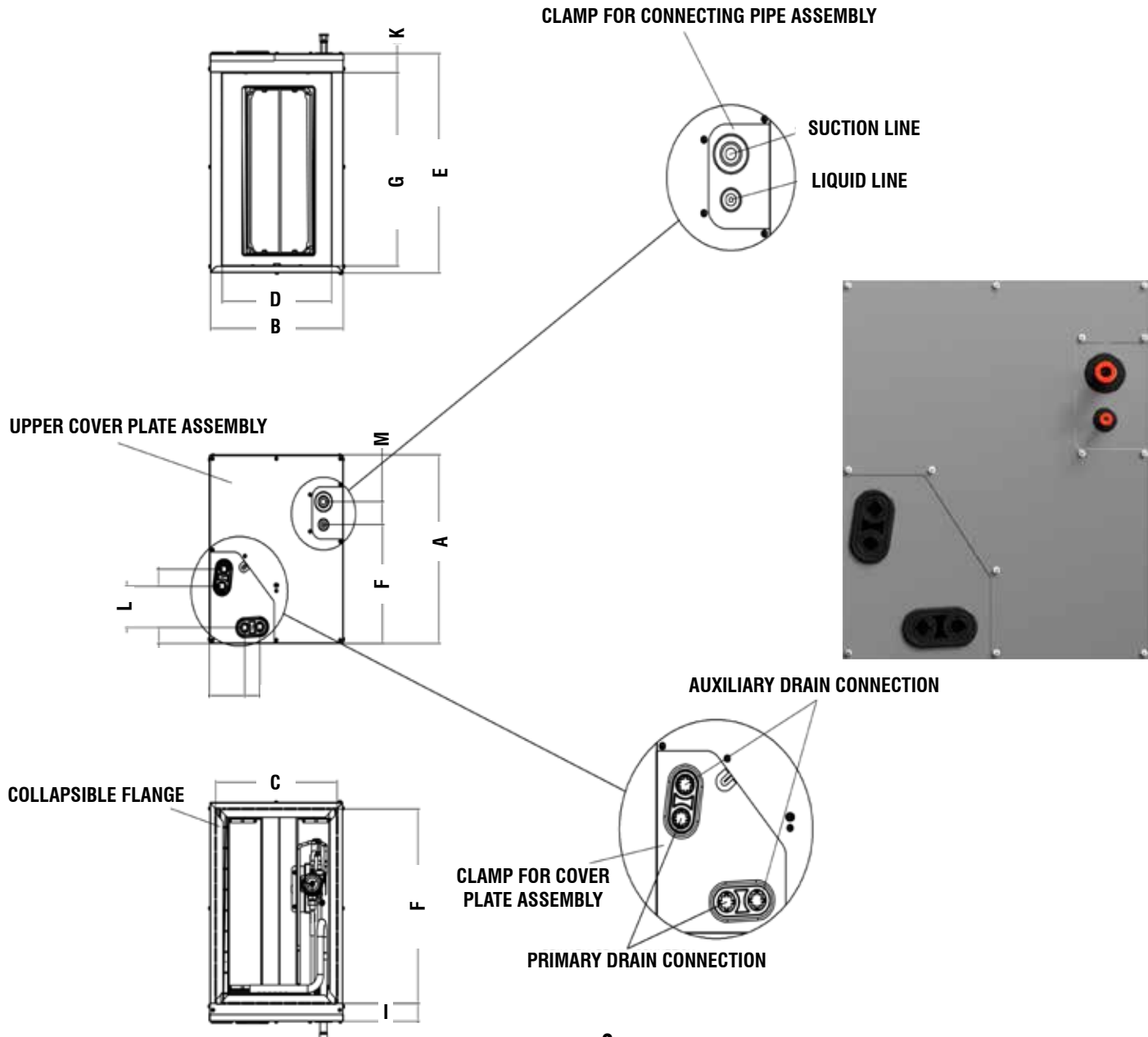
Auxiliary Heat Kits

	Power of Electric Heater	Number of Circuits	Voltage	Circuit 1 MCA	Circuit 2 MCA	Circuit 3 MCA	Circuit 1 Max. Fuse	Circuit 2 Max. Fuse	Circuit 3 Max. Fuse
Optional Electric Heater	EXP3KW	1	208/230V	14A/16A	-	-	-	-	-
	EXP5KW	1	208/230V	23A/27A	-	-	-	-	-
	EXP8KW	1	208/230V	37A/42A	-	-	40A/45A	-	-
	EXP10KW	1	208/230V	46A/53A	-	-	50A/60A	-	-
	EXP15KW	2	208/230V	23A/27A	46A/53A	-	25A/30A	50A/60A	-
	EXP20KW	2	208/230V	46A/53A	46A/53A	-	50A/60A	50A/60A	-
	EXP25KW	3	208/230V	23A/27A	46A/53A	46A/53A	25A/30A	50A/60A	50A/60A

DIMENSIONAL DRAWINGS

Model		MXP18/24A1A	MXP18/24B1A	MXP24/36A1A	MXP24/36B1A	MXP24/36C1A	MXP48/60C1A	MXP48/60D1A
Dimensions		in.	in.	in.	in.	in.	in.	in.
A	Model Height	18"	18"	23 5/16"	23 9/16"	24"	24"	28"
B	Model Width	14 1/2"	17 1/2"	14 1/2"	17 1/2"	21"	21"	24 1/2"
C	Supply Air Opening Width	13 1/4"	16 3/16"	13 1/4"	16 3/16"	19 3/4"	19 3/4"	23 1/4"
D	Return Air Opening Width	11 15/16"	14 15/16"	11 15/16"	14 15/16"	19 1/2"	19 1/2"	23 1/8"
E	Model Depth	20 1/4"	20 1/4"	20 1/4"	20 1/4"	20 1/4"	20 1/4"	20 1/4"
F	Supply Air Opening Depth	18 1/2"	18 1/2"	18 1/2"	18 1/2"	18 1/2"	18 1/2"	18 1/2"
G	Return Air Opening Depth	18 1/2"	18 1/2"	18 1/2"	18 1/2"	18 1/2"	18 1/2"	18 1/2"
H	Supply Air Opening Side Clearance	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
I	Supply Air Opening Front Clearance	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"
J	Return Air Opening Side Clearance	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
K	Return Air Opening Front Clearance	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"
L	Condensate Drains Height	1 7/16"	1 7/16"	1 7/16"	1 7/16"	1 7/16"	1 7/16"	1 7/16"
M	Liquid Line Height	11 3/8"	11 3/8"	17 15/16"	16 3/8"	17 1/2"	17 1/2"	21 7/16"

NOTE: AHRI combinations with MXP-Series Coils and VXP systems are "coil-only" matches, and result in lower SEER2, EER2, and HSPF2 ratings than with matching air handler. Review latest match information on www.marsdeliversratings.com before installation.



OUTDOOR UNIT

FEATURES	A-VXP18SA-1	A-VXP24SA-1	A-VXP30SA-1	A-VXP36SA-1	A-VXP48SA-1	A-VXP60SA-1
Power Supply	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz
Cooling Capacity (BTUH)	18,000	24,000	30,000	36,000	48,000	54,000
SEER2	19.0	18.3	16.8	17.4	16.5	16
EER2	12.5	11.7	11.7	11.7	10.5	10
HSPF4 2	9.7	10	10	10.2	9.5	9
COP	2.0	1.87	1.96	1.9	1.9	1.8
Cooling Amps	6.6	9	11.4	13.4	20	23.3
Heating Cap. (BTUH) @ -22°F	11,000	12,000	20,100	27,800	25,900	30,900
Heating Amps	7.6	9.5	12.4	13.1	20.5	23.1
Outdoor DBA	59	60	60.5	62.5	65	65
OUTDOOR UNIT DIMENSIONS						
Width (inches)	35.04	35.04	37.24	38.58	38.58	37.48
Height (inches)	26.50	26.50	31.89	38.39	38.39	52.48
Depth (inches)	13.46	13.46	16.14	16.34	16.34	16.34
Net Wt/Shipping Wt (lbs.)	101.4/109.13	102.29/109.13	164.02/174.69	204.15/235.23	201.06/232.36	242.95/275.13
ELECTRICAL DATA OUTDOOR UNIT ‡						
Main Power Connection	Outdoor Unit 208/230-1-60					
Min. Circuit Ampacity	**16	**19	**29.5	**29	**38	**40
Max. Fuse/HACR Circuit Breaker	**20	**20	**30	**30	**40	**40
LINE SETS O.D. (inch)						
Line Sets O.D. (inch) *	3/8 x 3/4	3/8 x 3/4	3/8 x 3/4	3/8 x 3/4	3/8 x 3/4	3/8 x 3/4
Max. Line Set Length ¹	98.4	164	164	246	246	246
Max. Elevation (outdoor) ²	65.6	82	82	98	98	98

Note:

*For alternative line set sizes, please refer to the VXP Vapor Line Sizing Chart

‡ Always follow local, state and national electrical codes

¹ Min. 10 ft. line set recommended

² Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit

****Verify Rating Plate Information
Prior to Installation.**

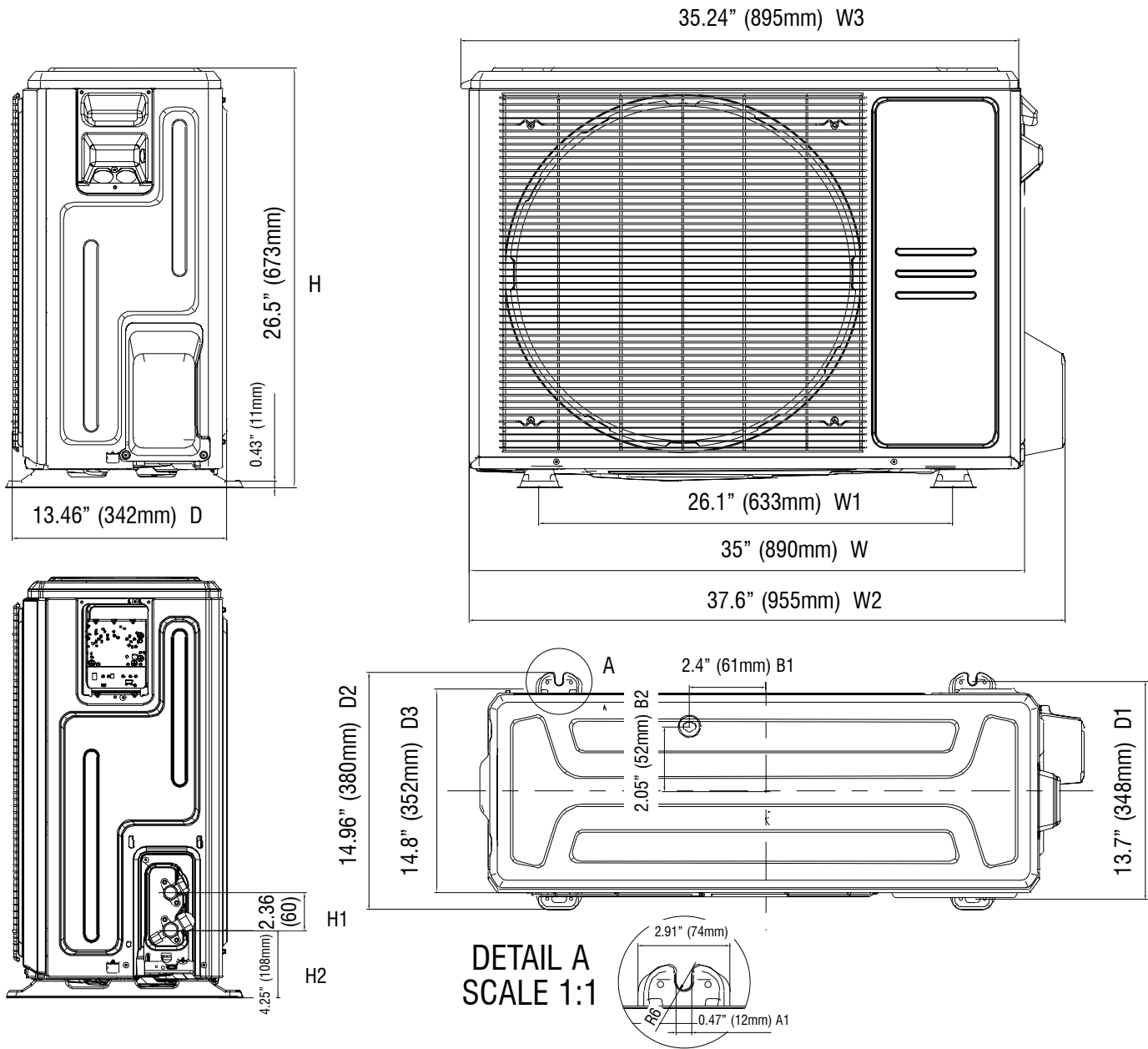
Minimum Circuit Ampacity and Maximum Fuse Values
May Have Changed from Original Specifications.



Comfort-Cure®

DIMENSIONAL DRAWINGS

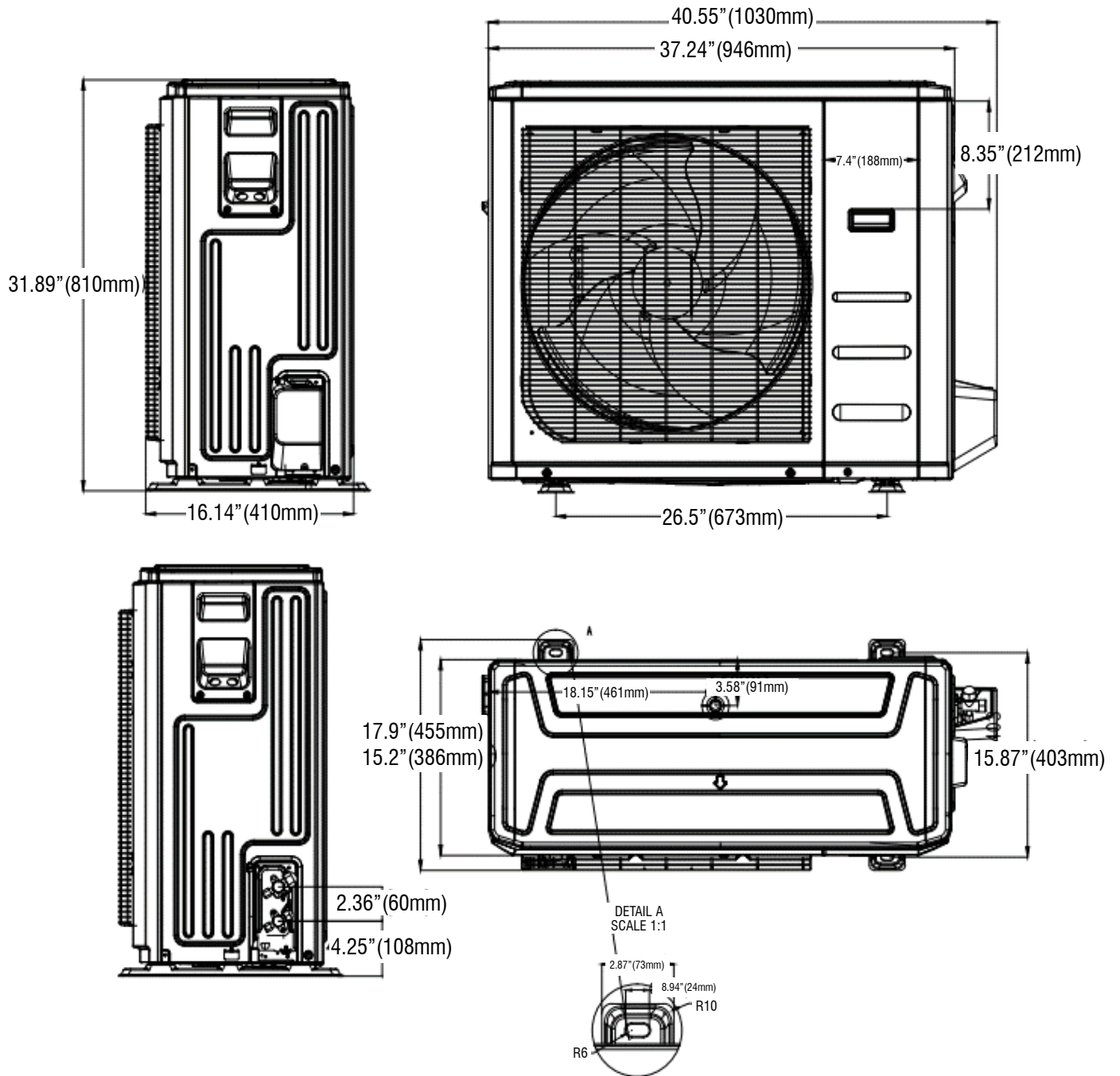
Outdoor Unit Dimensions - 18K & 24K



Comfort-Cure®

DIMENSIONAL DRAWINGS

Outdoor Unit Dimensions - 30 & 36K

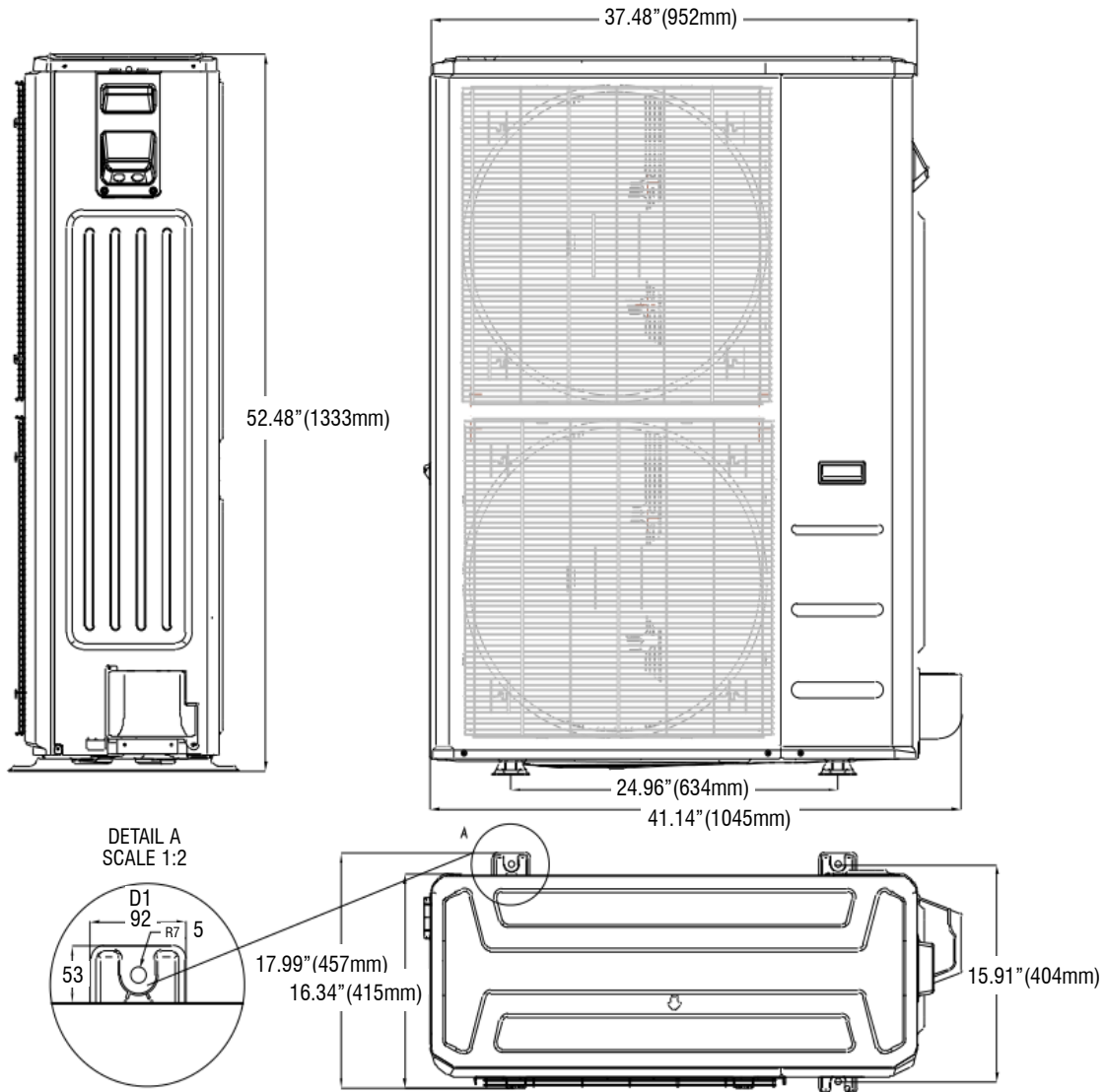


Comfort-Cire®



DIMENSIONAL DRAWINGS

Outdoor Unit Dimensions - 48-60K



Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations.

Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.



"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."