

PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

BREEZE™
THE UNIVERSAL HEAT PUMP

AIR HANDLER/INDOOR UNITS:



WFH24Y193C, WFH36Y193C



WFH48Y223C, WFH60Y223C

FEATURES

- Universal compatibility to existing air handler or gas furnace
- Accommodates long piping runs up to 246 ft. for Premier models and up to 131 ft. for Select models and height differentials up to 98 ft.
- Precision Inverter® delivers efficiencies of up to 19.0 SEER2 and 10 HSPF2.
- Operates in extreme temperatures down to -22° F in heat pump mode, with cooling in temperatures as low as 5°F.
- Built-in base pan heater and optional auxiliary heater kit.
- Soft-Start™ technology for quiet start-up, and precise temperature control.
- Quiet operation as low as 35 dB(A).
- Ultra-compact design with a 40% smaller footprint than traditional and top-discharge units.
- Multi-position Air Handler.
- ENERGY STAR® Certified for Cold Climate models available.
- Eligible for many federal & local tax credit & rebate incentives.

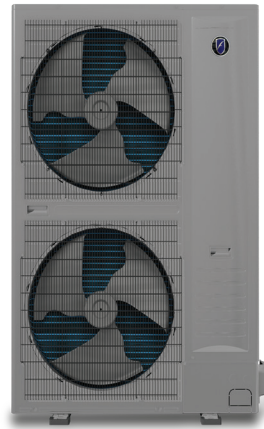
INVERTER HEAT PUMP CONDENSER/OUTDOOR



FPHFR24A3D



FPHFR36A3D



FPHFR48A3D

HEATER KITS

- AUX5KWA
- AUX7KWA
- AUX10KWA
- AUX15KWA
- AUX20KWA

24V THERMOSTAT

- SWRT1B



Specifications

BREEZE™ Premier
THE UNIVERSAL HEAT PUMP



2-Ton



3-Ton



4-Ton

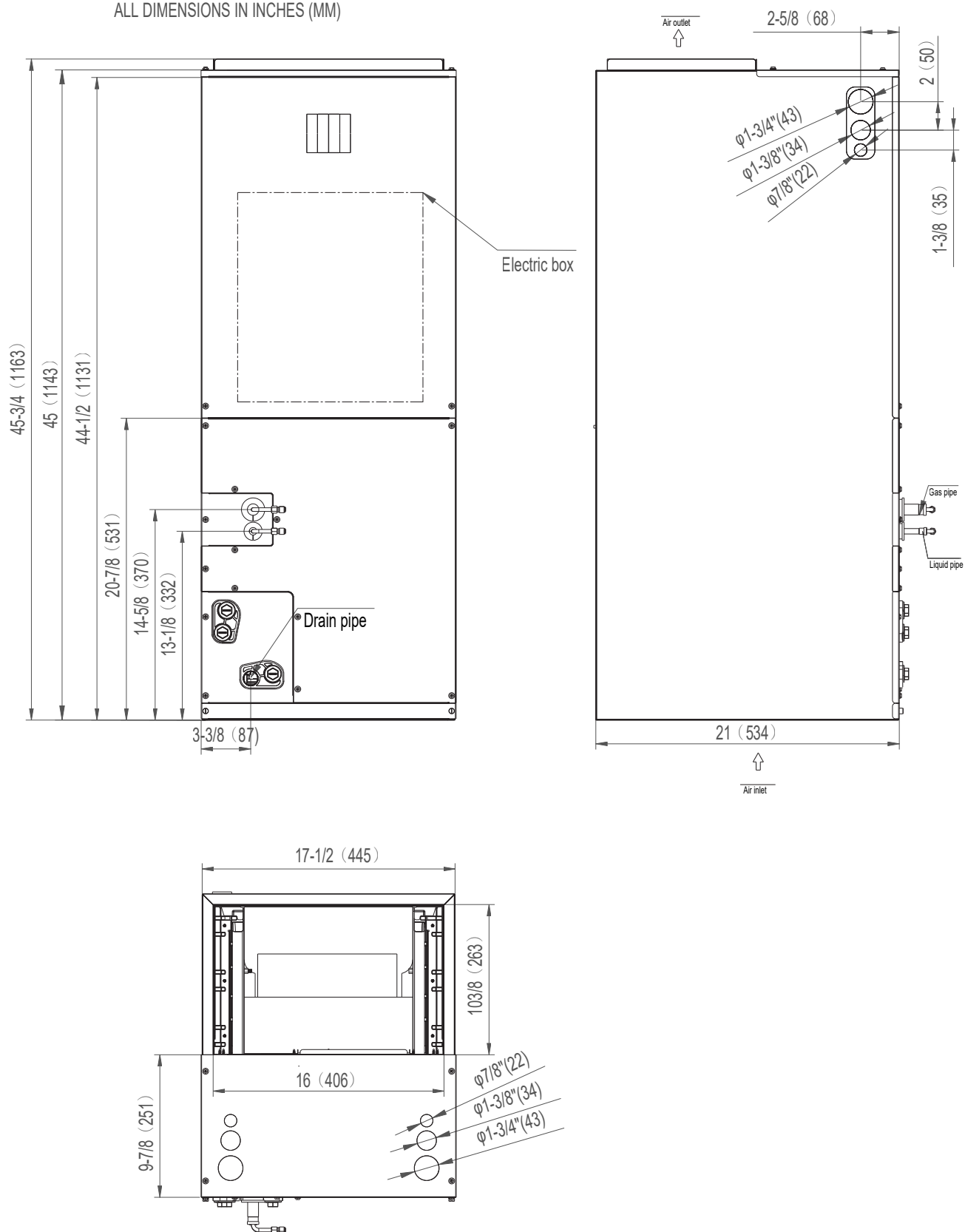
SYSTEM COMPONENTS	Indoor Model	Unit	FPHFA24A3D	FPHFA36A3D	FPHFA48A3D
	Outdoor Model		FPHFR24A3D	FPHFR36A3D	FPHFR48A3D
ENVIRONMENTAL	ENERGY STAR® Standard	Y/N	Y	Y	Y
	ENERGY STAR® Cold Climate	Y/N	Y	Y	Y
	A2L Sensor	Y/N	Y	Y	Y
ELECTRICAL	Power Supply	V/Hz/ph	208-230/60/1	208-230/60/1	208-230/60/1
	Rated Current – Indoor	A	9.4	14	18.8
	Thermostat Type		Wired	Wired	Wired
	Rated Current – Outdoor	A	8.7	13	17.8
	MCA – Outdoor (Indoor powered by outdoor)	A	22	30	37
	Max. Circuit Breaker	A	30	50	50
	Communication Cable		4 × 18AWG	4 × 18AWG	4 × 18AWG
	Rated Capacity @ 95°F	Btu/h	24,000	36,000	48,000
COOLING PERFORMANCE	Cooling Capacity Range (Min.–Max.)	Btu/h	10,500–31,000	12,000–45,000	16,800–61,000
	Cooling Capacity Range (Min.–Max.)	W	3,077–9,085	3,517–13,189	4,924–17,878
	Capacity @ 115°F	Btu/h	19,200	28,800	38,400
	Power Input	W	2,050	3,070	4,100
	Current	A	9.4	14	18.8
	EER2 @ 95°F	Btu/h/W	11.7	11.7	11.7
	SEER2	Btu/h/W	18	19	19
	Operating Temp. Range – Indoor	°F (°C)	61–86 (16–30)	61–86 (16–30)	61–86 (16–30)
	Operating Temp. Range – Outdoor	°F (°C)	5–125 (–15–52)	5–125 (–15–52)	5–125 (–15–52)
	Rated Capacity at 47°	Btu/h	24,000	36,000	48,000
HEATING PERFORMANCE	Heating Capacity Range (Min.–Max.)	Btu/h	11,700–33,000	11,000–45,000	15,800–65,000
	Heating Capacity Range (Min.–Max.)	W	3,428–9,670	3,324–13,189	4,630–19,050
	Power Input	W	1,900	2,800	3,900
	Current	A	8.7	13	17.8
	COP @ 47°	W/W	3.7	3.77	3.6
	COP @ 5°	W/W	1.9	2	1.8
	HSPF2	Btu/h/W	10	9	9
	Rated Heating Capacity @ 17°F (–8.3°C)	Btu/h	18,500	26,000	34,000
	Max. Heating Capacity @ 17°F (–8.3°C)	Btu/h	24,000	36,000	48,000
	Max. Heating Capacity @ 5°F (–15°C)	Btu/h	24,000	36,000	48,000
	Max. Heating Capacity @ –5°F (–20.5°C)	Btu/h	16,800	28,800	38,000
	Max. Heating Capacity @ –13°F (–25°C)	Btu/h	14,400	25,200	33,600
	Max. Heating Capacity @ –22°F (–30°C)	Btu/h	10,000	13,000	15,000
	Operating Temp. Range – Indoor	°F (°C)	61–86 (16–30)	61–86 (16–30)	61–86 (16–30)
	Operating Temp. Range – Outdoor	°F (°C)	–13–75 (–25–24)	–13–75 (–25–24)	–13–75 (–25–24)
	Output	HP	1/2	7/8	7/8
	RLA	A	2.6	3.8	5.4
	Speed	r/min.	350–1,400	350–1,400	350–1,400
INDOOR FAN MOTOR (Multi-speed ECM)	Indoor Airflow Rated	CFM (m³/h)	800 (1,360)	1,118 (1,900)	1,600 (2,720)
	Indoor Airflow (Min.–Max.)	CFM (m³/h)	529–823 (900–1,400)	736–1,176 (1,250–2,000)	1,058–1,647 (1,800–2,800)
	Indoor Airflow Ultra-low Speed	CFM (m³/h)	529 (900)	736 (1,250)	1,058 (1,800)
	Rated	in. W.C. (Pa)	0.58 (145)	0.58 (145)	0.58 (145)
STATIC PRESSURE	Range	in. W.C. (Pa)	0–0.8 (200)	0–0.8 (200)	0–0.8 (200)
	Output	HP	1/7	1/3	1/5
OUTDOOR FAN MOTOR	RLA	A	0.8	1.5	1
	Speed	r/min.	880	850	890
	Outdoor Airflow (High)	CFM (m³/h)	2,235 (3,800)	3,350 (5,700)	4,820 (8,200)
	Input	W	2,575	3,800	5,830
COMPRESSOR	Rated Current	A	10.8	14.6	21.2
	Compressor	A	15	19	29
	Refrigerant Oil	ml	FV68S / 900	FV68S / 1,200	VG75 / 1,700
	Refrigerant Charge	oz. (kg)	88.1 (2.3)	112.9 (3.2)	169.3 (4.8)
REFRIGERANT (R-454B)	Factory Pre-charge	ft. (m)	25 (7.5)	25 (7.5)	25 (7.5)
	Additional Charge for Each ft.	oz./ft.	0.38	0.38	0.38
	Liquid Side / Gas Side	in. (mm)	3/8" / 5/8" (Ø9.52 / Ø15.88)	3/8" / 5/8" (Ø9.52 / Ø15.88)	3/8" / 3/4" (Ø9.52 / Ø19.05)
	Max. Pipe Length	ft. (m)	164 (50)	164 (50)	246 (75)
	Max. Difference in Level	ft. (m)	98 (30)	98 (30)	98 (30)
	Design Pressure (H / L)	PSIG (MPa)	600 / 415 (4.14 / 2.86)	600 / 415 (4.14 / 2.86)	600 / 415 (4.14 / 2.86)
	Indoor Noise Level (High)	dB(A)	51	60	62
	Drainage Water Pipe Diameter	in.	1-1/4"	1-1/4"	1-1/4"
MISC.	Outdoor Throttle Type		EEV	EEV	EEV
	Moisture Removal	pints/hr (L/hr)	4.64 (2.2)	8.5 (4)	13.15 (6.23)
	Indoor Unit Dimensions (W×H×D)	in. mm	17-4/8×45×21 445×1,143×534	19-5/8×46-1/8×21-5/8 500×1,170×550	22×53-7/8×24 560×1,370×610
NET DIMENSIONS & WEIGHTS	Indoor Unit Packing (L×W×H)	in. mm	20-4/8×25-2/8×49-6/8 520×1,265×640	22-1/2×49-5/8×25-3/8 570×1,260×645	25-2/8×55-4/8×28 640×1,410×710
	Indoor Unit Net Weight	lbs. (kg)	130.5 (59.2)	135.1 (61.3)	180.6 (82)
	Indoor Unit Shipping Weight	lbs. (kg)	153.6 (69.7)	158.1 (71.7)	204.4 (92.7)
	Outdoor Unit Dimensions (W×H×D)	in. mm	35-3/8×29-4/8×13-3/8 900×750×340	43-2/8×34-4/8×17-6/8 1,100×875×450	38-3/8×57-4/8×13 975×1,460×330
	Outdoor Unit Packing (L×W×H)	in. mm	41×32-5/8×18-1/8 1,040×830×460	45-7/8×39-4/8×21-2/8 1,165×1,005×540	44-1/8×62-5/8×16-6/8 1,120×1,590×435
	Outdoor Unit Net Weight	lbs. (kg)	123.4 (56)	185.2 (84)	244.7 (111)
	Outdoor Unit Shipping Weight	lbs. (kg)	132.3 (60)	209.4 (95)	266.8 (121)

NOTE: Pipe lengths over 100 feet = will require an increase in communication cable to 16 AWG.
Lengths over 262 feet will require an increase in communication cable to 14 AWG.

BREEZE™ | AIR HANDLER/INDOOR DIMENSIONS

AIR HANDLER/INDOOR MODELS: FPHFA24A3D (2-TON)

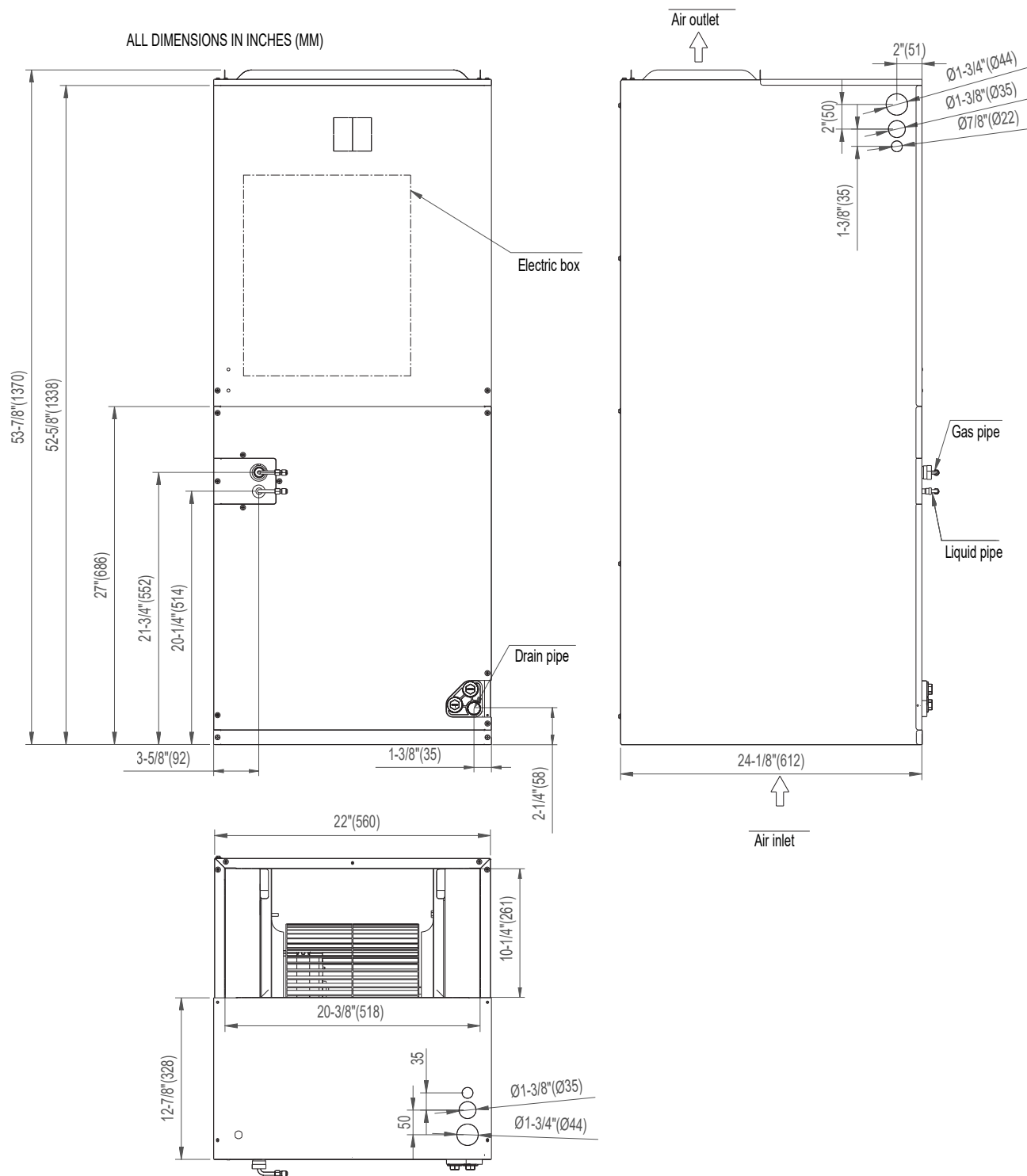
ALL DIMENSIONS IN INCHES (MM)



AIR HANDLER/INDOOR MODELS: FPHFA36A3D (3-TON)

BREEZE™ | AIR HANDLER/INDOOR DIMENSIONS

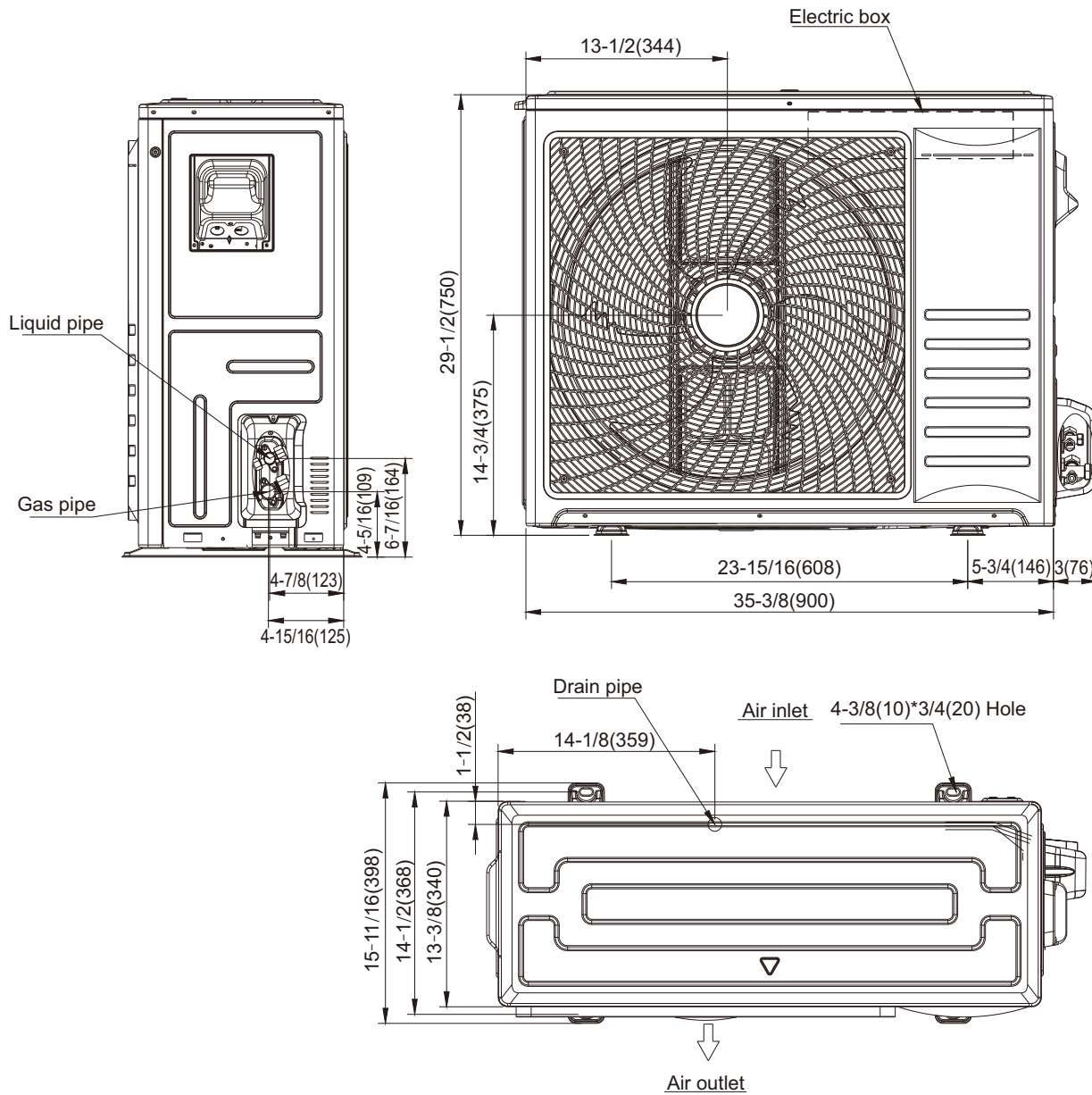
AIR HANDLER/INDOOR MODELS: FPHFA48A3D (4-TON)



BREEZE™ | CONDENSER/OUTDOOR DIMENSIONS

INVERTER HEAT PUMP CONDENSER/OUTDOOR: FPHFR24A3D (2-TON)

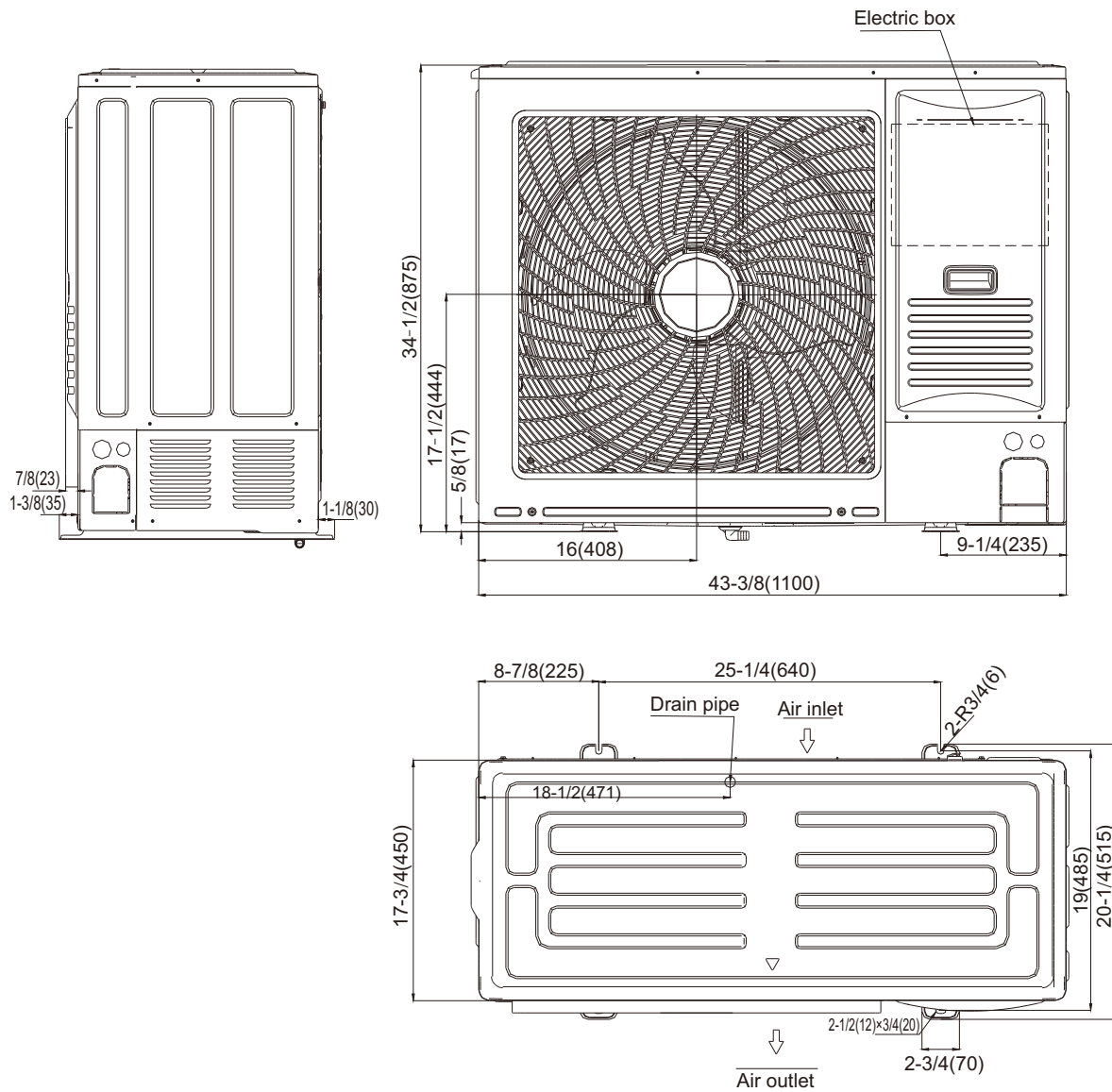
Unit : in.(mm)



BREEZE™ | CONDENSER/OUTDOOR DIMENSIONS

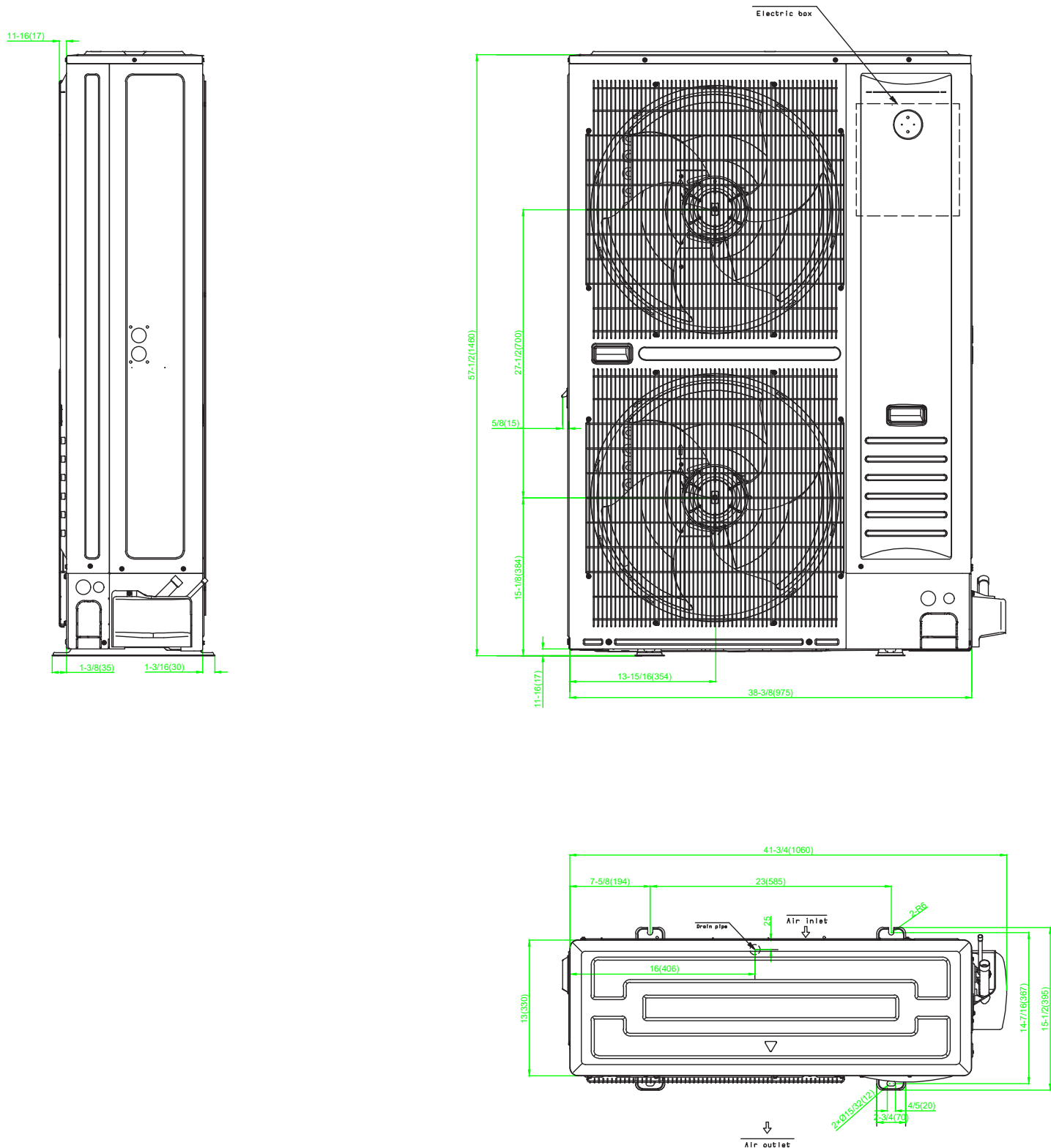
INVERTER HEAT PUMP CONDENSER/OUTDOOR: FPHR36A3D (3-TON)

Unit: in.(mm)



BREEZE™ | CONDENSER/OUTDOOR DIMENSIONS

INVERTER HEAT PUMP CONDENSER/OUTDOOR: FPHR48A3D



¹System rated performance is only guaranteed when paired with a properly installed Friedrich air handler; Performance may be diminished when paired with a non-Friedrich air handler, and eligibility for rebates may be voided; Due to continuing research in new energy-saving technology, specifications are subject to change without notice. ²Dependent on system combination and overall efficiency; High Efficiency Electric Home Rebates are dependent on state participation and available funding; Visit [Friedrich.com/Federal-Incentives](https://www.friedrich.com/Federal-Incentives) for complete details.

