

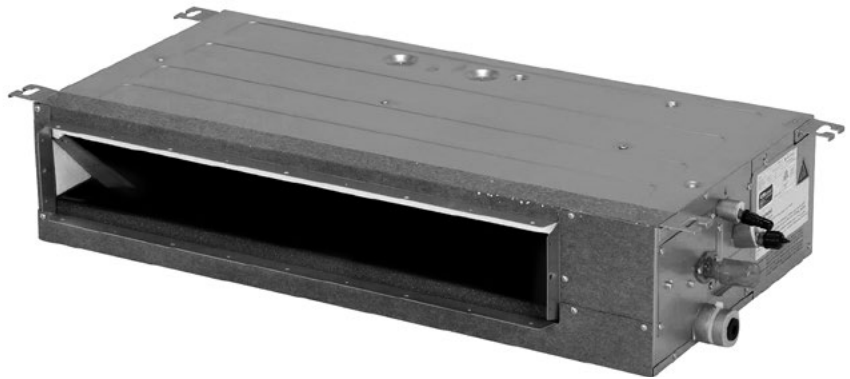
PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

## FEATURES

- Inverter technology (variable speed compressor)
- Internal condensate pump with 27 ½" lift\* included
- Cooling/Heating/Fan Mode
- Dry Mode
- 3 Fan speeds
- 24-hour on/off timer
- Auto restart
- Auto changeover
- Sleep mode
- Control lock function
- External Static Pressure Range(ESP)
  - 24,000 (0.1 - 0.78) WC
  - 36,000 (0.15 - 0.6) WC
- BLDC Motors

\* Lift from drain pan to the highest point 27 ½"



**PRECISION  
 INVERTER®**



# SPECIFICATIONS

PERFORMANCE RATINGS		Single Zone - The Insider® Concealed Ducted Heat Pumps				
SYSTEM MODEL NO.		FPHD093	FPHD123	FPHD183	FPHD243	FPHD363
INDOOR MODEL		FPHFD09A3A	FPHFD12A3A	FPHFD18A3A	FPHFD24A3A	FPHSD36A3A
OUTDOOR MODEL		FPHFR09A3A	FPHFR12A3A	FPHFR18A3A	FPHFR24A3A	FPHFR36A3A
<b>SPECIFICATIONS</b>						
CAPACITY COOLING (RATED)	Btu	9000	12000	18000	24000	36000
CAPACITY COOLING (MIN~MAX)	Btu	4850-11600	5800-13100	4200-21000	8600-25200	12500-37300
CAPACITY HEATING @47°F (RATED)	Btu	11000	12000	18000	28000	36000
CAPACITY HEATING @17°F (RATED)	Btu	6000	6600	12000	19200	26000
CAPACITY HEATING (MIN~MAX)	Btu	4340-12280	4400-14400	5600-24000	7600-28400	15000-39800
SENSIBLE HEAT RATIO		76%	76%	76%	76%	76%
SEER		20.0	19.5	19.5	18.0	18.0
EER		12.00	11.00	11.80	10.50	10.90
COP (@47°F)		3.2	3.2	3.3	3.61	3.01
HSPF		10.00	10.00	10.00	11.00	9.50
ENERGY STAR		—	—	—	—	—
MOISTURE REMOVAL	Pts/h	2.0	3.0	5.0	1.9	7.61
AIRFLOW (LOW, MED, HIGH )	CFM	309/259/208	324/285/235	529/441/371	706/588/500	883/735/617
SOUND RATING - INDOOR H/M/L	dB(A)	35/33/32	36/34/33	38/37/36	42/38/36	43/40/38
SOUND RATING - OUTDOOR	dB(A)	52	54	68	54	61
OPERATING RANGE (COOLING)	°F	5-118	5-118	5-118	5-118	5-118
OPERATING RANGE (HEATING)	°F	-4-75	-4-75	-4-75	-4-75	-4-75
EST. YEARLY OPERATING COST	\$	63	83	122	176	376
<b>ELECTRICAL DATA</b>						
POWER SOURCE		230/208-60-1	230/208-60-1	230/208-60-1	230/208-60-1	230/208-60-1
MINIMUM AMPACITY	A	23.0	23.0	23.0	23.0	21.0
COOLING WATTS	W	750	1091	1670	2200	3300
COOLING AMPS		3.7	4.8	7.6	10.3	14.35
HEATING AMPS		3.2	4.8	7.3	8.7	15.2
MAX. TD FUSE/BREAKER	A	15	20	20	35	45
POWER AND COMMUNICATION CABLE	No. x AWG	4 x 14AWG	4 x 14AWG	4 x 14AWG	4 x 14AWG	4 x 14AWG
<b>REFRIGERATION SYSTEM</b>						
REFRIGERANT		R410a	R410a	R410a	R410a	R410a
COMPRESSOR TYPE		Rotary	Rotary	Rotary	Rotary	Rotary
CONNECTIONS		Flare	Flare	Flare	Flare	Flare
LIQUID LINE O.D.	in	1/4	1/4	1/4	3/8	3/8
SUCTION LINE O.D.	in	3/8	3/8	1/2	5/8	3/4
FACTORY PRECHARGE	ft	25	25	25	25	25
REFRIGERANT CHARGE	oz	33.5	45.9	56.5	75.0	111
MIN./MAX. LINE LENGTH	ft	10-82	10-82	10-98	10-164	10-164
MAX. HEIGHT DIFFERENCE	ft	33	49	49	98	98
<b>DIMENSIONS &amp; WEIGHT</b>						
<b>INDOOR UNIT</b>						
W X H X D	in	35 7/8 x 7 1/2 x 17 5/8	35 7/8 x 7 1/2 x 17 5/8	46 1/2 x 7 1/2 x 17 5/8	35 3/8 x 10 5/8 x 28 3/8	51 1/8 x 13 3/4 x 31 1/2
NET WEIGHT	lbs	39.7	39.7	49.6	66.1	112.4
SHIPPING WEIGHT	lbs	46.3	46.3	57.3	77.2	132.3
<b>OUTDOOR UNIT</b>						
W X H X D	in	37 x 25 x 16 1/2	37 x 25 x 16 1/2	39 x 17 3/4 x 28 3/4	43 x 36 1/4 x 18 1/8	43 x 36 1/4 x 18 1/8
NET WEIGHT	lbs	75	75	108	155	192
SHIPPING WEIGHT	lbs	85	82	117	166	215
TOTAL NET WEIGHT	lbs	107	108	108	214.5	262.5
TOTAL SHIPPING WEIGHT	lbs	123.5	121	158	245.5	305.4

Your operating costs will depend on your utility rates and use. The estimated operating cost is based on a electricity cost of \$ .12 per kWh.

For more information, visit [www.ftc.gov/energy](http://www.ftc.gov/energy).

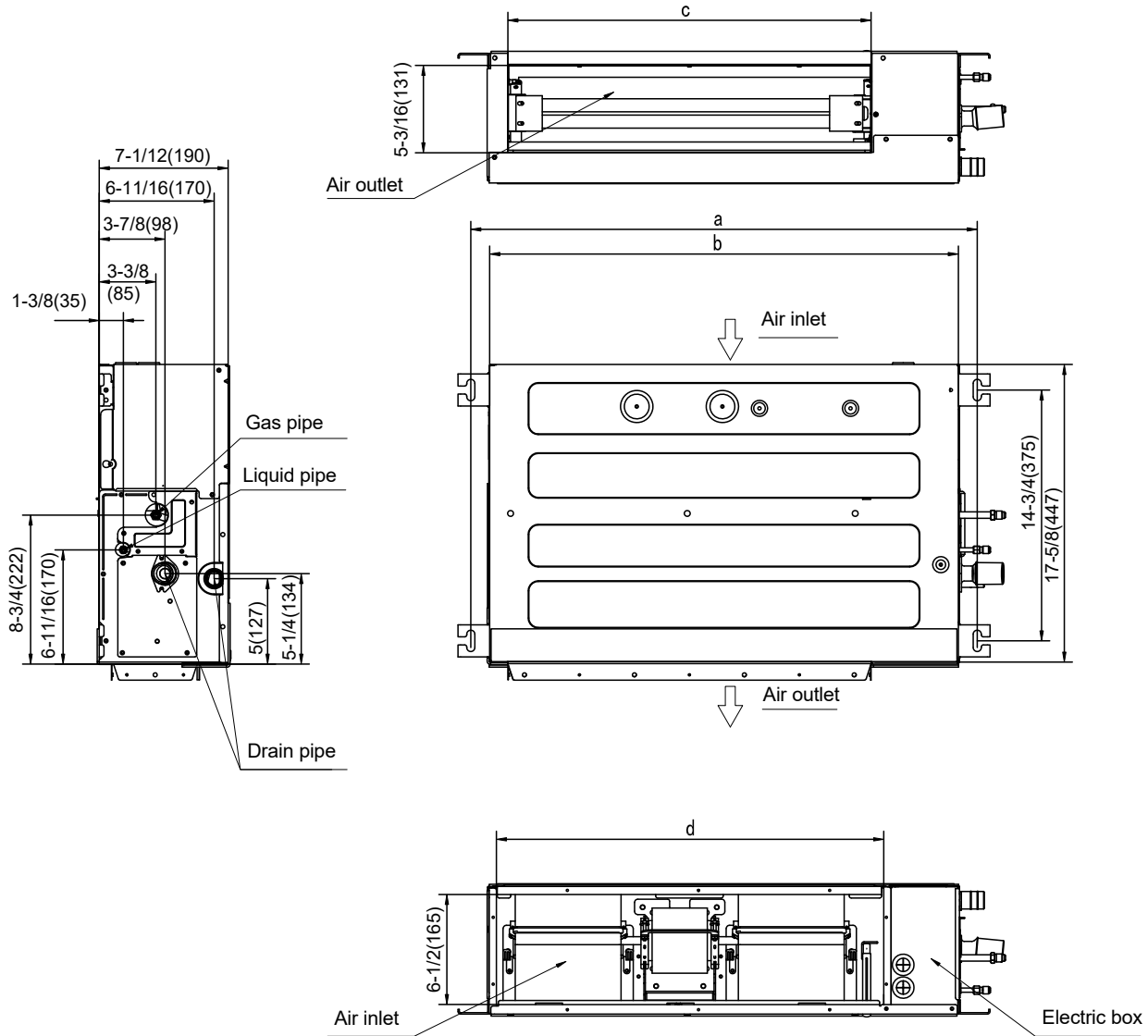
Due to continuing research in new energy-saving technology, specifications are subject to change without notice.



# DIMENSIONAL DRAWINGS

## INDOOR UNITS / FPHFD09A3A, FPHFD12A3A, FPHFD18A3A

UNIT: INCHES (MM)

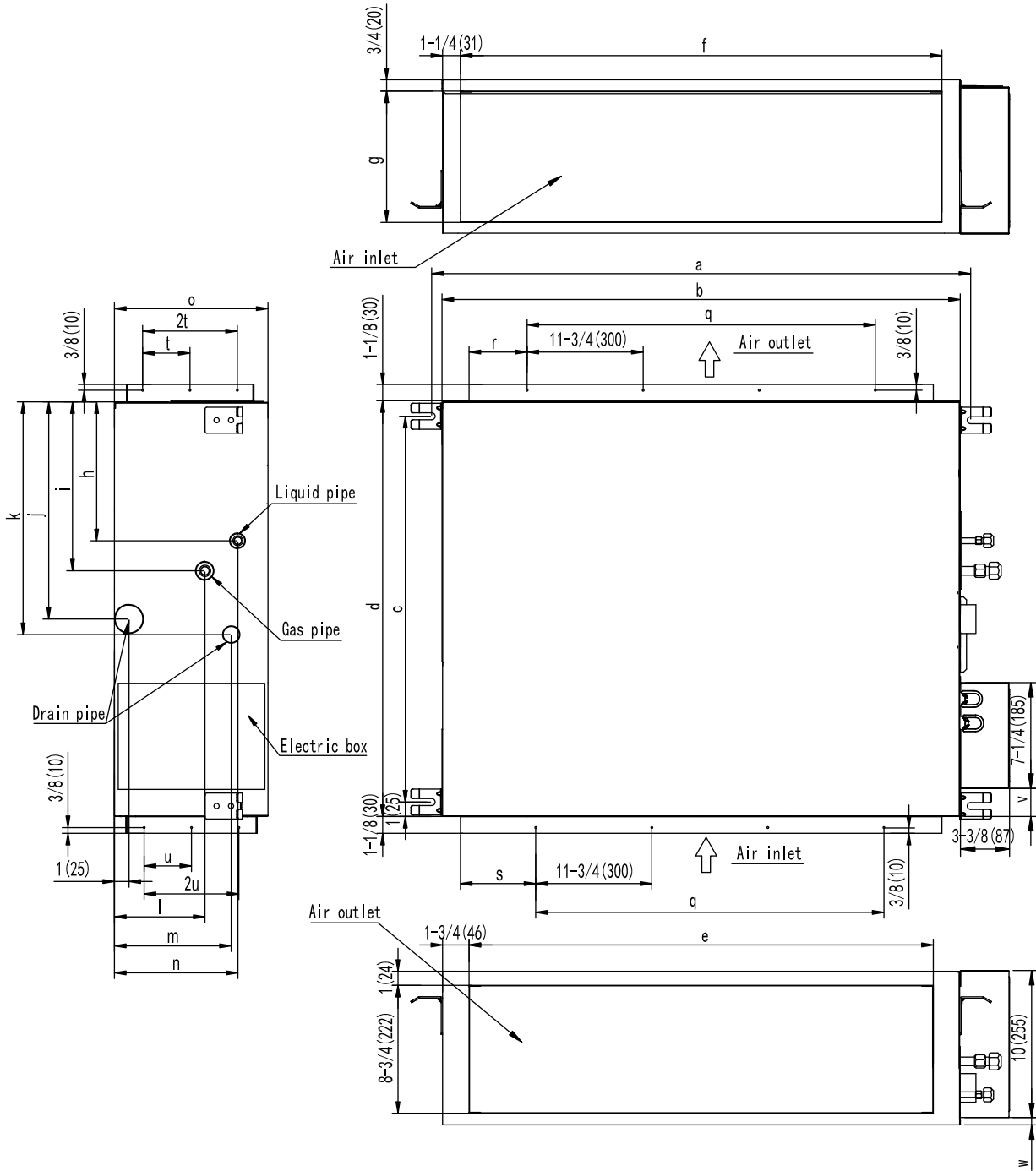


Model ( Btu/h)	a	b	c	d
9K/12K	37-13/16 (961)	35-13/16 (910)	29-1/2 (749)	30 (786)
18K	48-7/16 (1231)	46-7/16 (1180)	40-1/8 (1019)	41-5/8 (1056)

# DIMENSIONAL DRAWINGS

## INDOOR UNITS / FPHFD24A3A, FPHFD36A3A

UNIT: INCHES (MM)

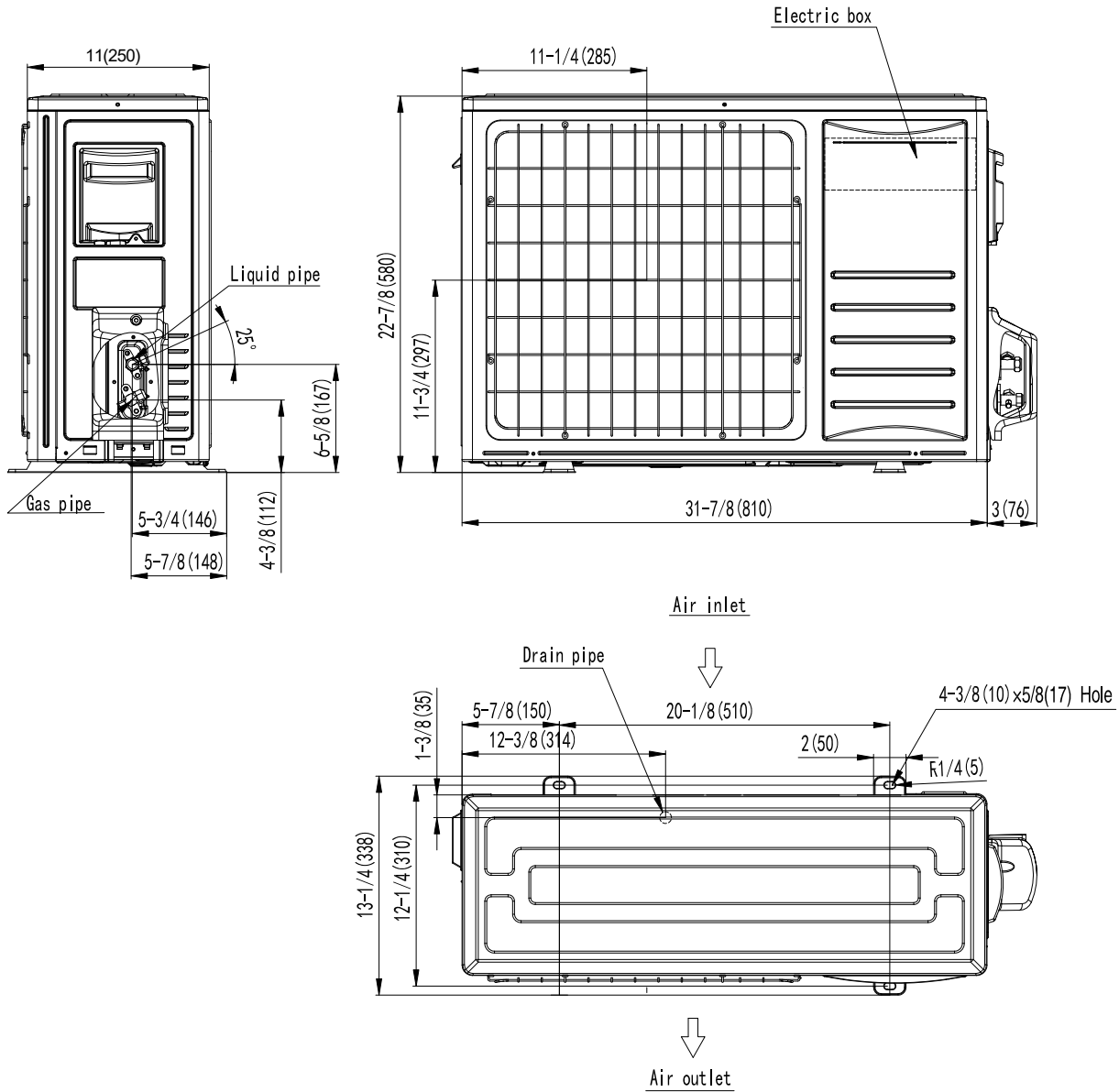


Model	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	q	r	s	t	u	v	w
24K	36-3/4 (934)	35-3/8 (900)	26-3/8 (669)	28-3/8 (720)	31-3/4 (805)	32-7/8 (835)	9 (228)	9-1/2 (242)	11-5/8 (294)	14-7/8 (378)	16 (405)	6-1/8 (156)	8 (202)	8-3/8 (214)	10-5/8 (270)	23-5/8 (600)	4 (102)	4-5/8 (117)	3-1/4 (82)	3-1/4 (82)	1-7/8 (49)	1/4 (5)
36K	52-1/2 (1334)	51-1/8 (1300)	29-3/4 (756)	31-1/2 (800)	47-1/2 (1205)	48-5/8 (1235)	12-1/8 (308)	9-3/8 (237)	12-3/8 (312)	14-3/4 (375)	15-3/4 (400)	8 (204)	7-3/8 (186)	9-1/2 (242)	13-3/4 (350)	35-3/8 (900)	6 (153)	6-5/8 (168)	3-1/2 (90)	5-1/2 (140)	4-3/8 (110)	1-7/8 (49)

# DIMENSIONAL DRAWINGS

## OUTDOOR UNITS / FPHFR09A3A, FPHFR12A3A

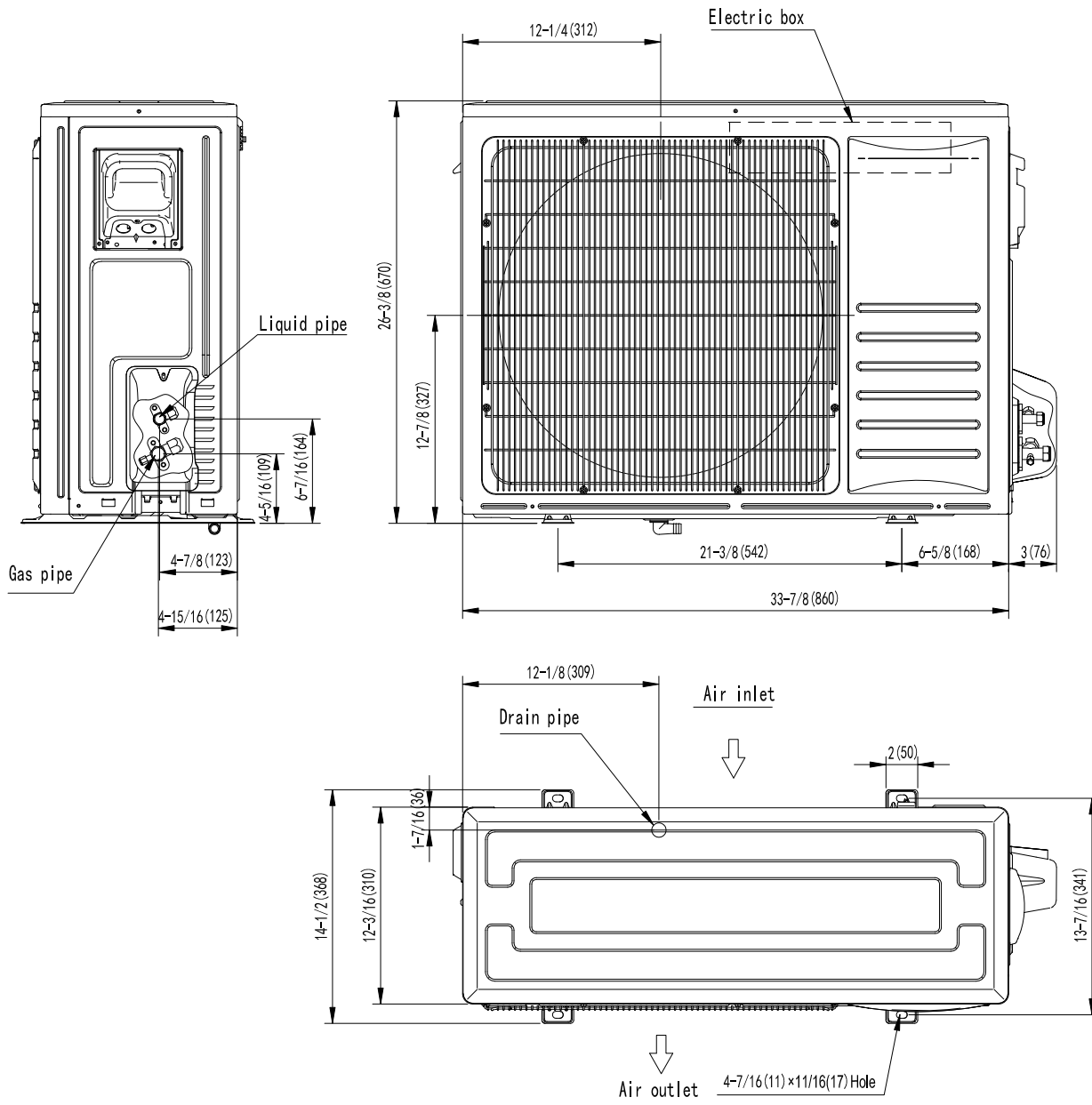
UNITS: INCHES (MM)



# DIMENSIONAL DRAWINGS

## OUTDOOR UNITS / FPHFR18A3A, FPHFR24A3A

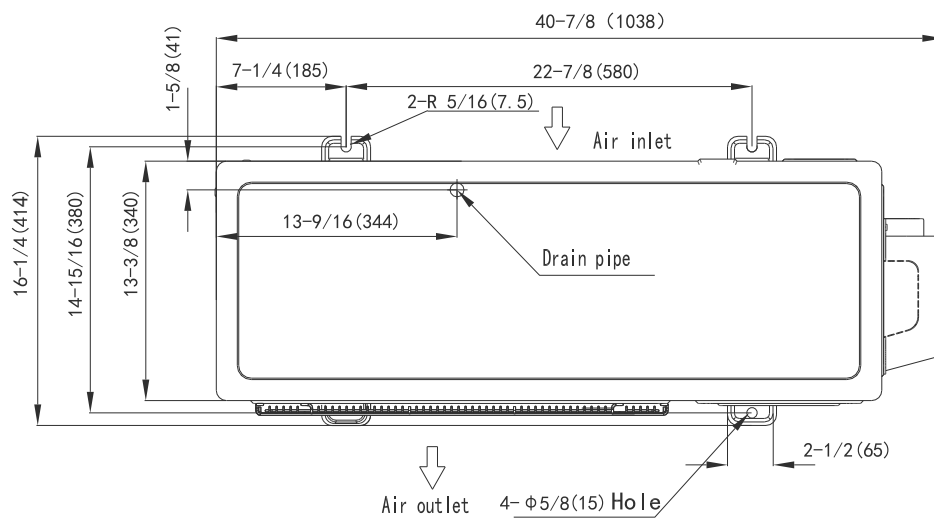
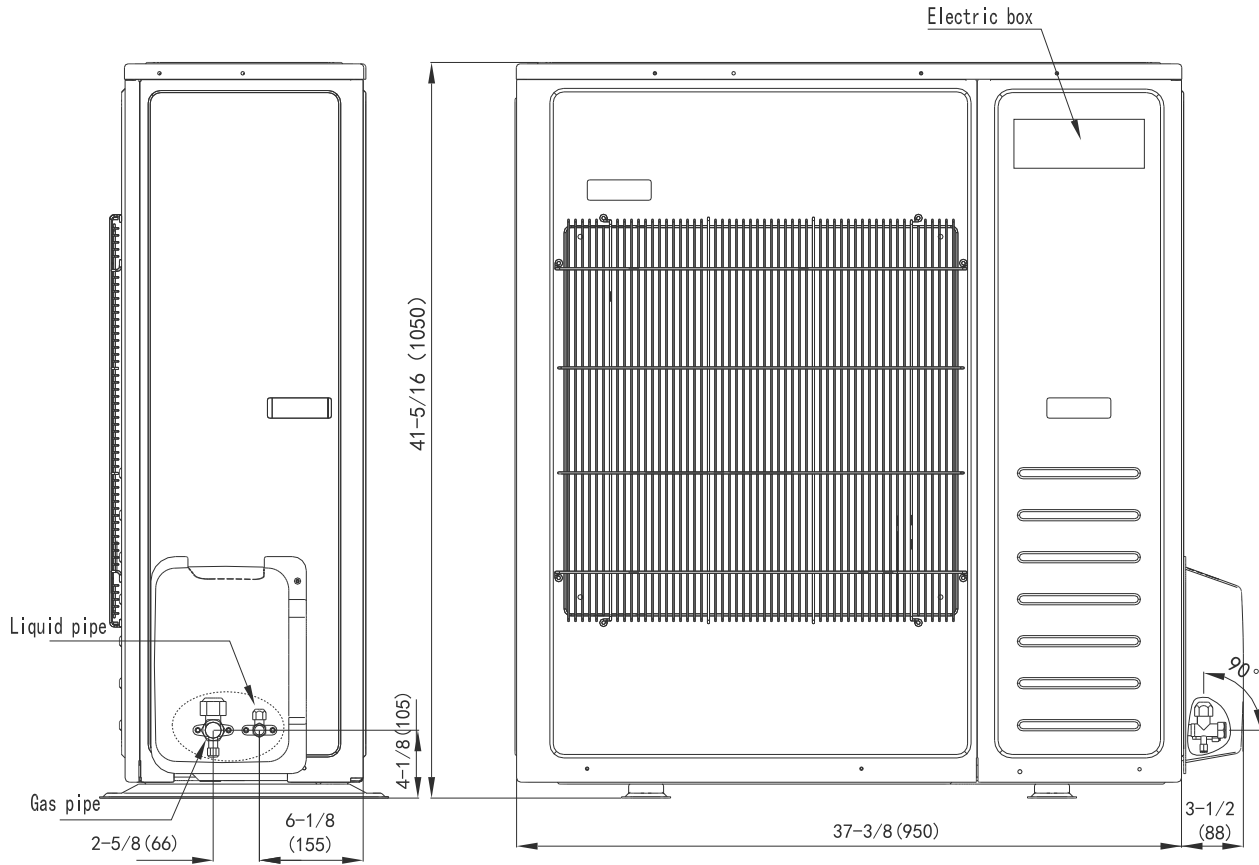
UNITS: INCHES (MM)



# DIMENSIONAL DRAWINGS

## OUTDOOR UNITS / FPHFR36A3A

UNITS: INCHES (MM)



## ACCESSORIES

### REFRIGERATION LINE SETS\* (Required accessory)

Kit#	Length (ft.)	Liquid	Suction	System Model
T32150	15'	1/4"	3/8"	FPHD093 FPHD123
T32350	35'	1/4"	3/8"	
T42150	15'	1/4"	1/2"	FPHD183
T42350	35'	1/4"	1/2"	
T53150	15'	3/8"	5/8"	FPHD243
T53350	35'	3/8"	5/8"	
T63150	35'	3/8"	3/4"	FPHD36
T63350	35'	3/8"	3/4"	

\*Insulated line sets are available for all Friedrich split systems in 15 ft. and 35 ft. lengths. Each line set is equipped with flare nuts on both ends. Both liquid and suction lines are insulated. Line sets can be joined together with field supplied double male connectors. Each system requires one line set for each indoor unit installed.

### REFRIGERATION LINE SETS MIN./MAX. LENGTHS

Floating Air® Pro		
System Model	Min. (ft.)	Max. (ft.)
FPHD093	25	82
FPHD123	25	82
FPHD183	25	82
FPHD243	25	164
FPHD363	25	164

### TORQUE WRENCH SETTINGS

Outside Diameter		Torque	
mm	inch	ft-lbs.	N·m
6.35	1/4	13 - 18	17.6 - 24.5
9.52	3/8	25 - 30	33.3 - 41.2
12.7	1/2	40 - 47	53.9 - 64.7
15.88	5/8	45 - 59	61.7 - 80.4

## WALL CONTROLLER



FPWC1 Optional wired wall controller