

| | | |
|--------------|--------------|---------------|
| 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

- Precision Inverter® technology (variable speed compressor)
- Internal condensate pump with 27 ½" lift* included
- Soft start compressor
- BLDC Motor
- Cooling/Heating/Fan mode
- Dry Mode
- 3 Fan speeds
- Auto restart
- Auto changeover
- Diamonblue Advanced Corrosion Protection®
- Control lock function on controller
- External Static Pressure Range (ESP)
 - 9K/12K/18K (0 - 0.40) WC
 - 24K (0 - 0.40) WC



OPERATION IN EXTREME CONDITIONS

- Low ambient operation down to 14° F (Cooling mode)
- Low ambient operation down to -13° F (Heating mode)
- Low temperature compressor start-up protection

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



FPHMR18A3A , FPHMR24A3A



FPHMR36A3A



FPHMR42A3A

SPECIFICATIONS

| PERFORMANCE RATINGS | | Multi Zone - The Insider® Concealed Ducted Heat Pumps | | | |
|--------------------------------|------------|---|--------------|--------------------------|------------------|
| | | 9k | 12k | 18k | 24k |
| INDOOR MODEL | | FPHFD09A3A | FPHFD12A3A | FPHFD18A3A | FPHFD24A3A |
| SPECIFICATIONS | | | | | |
| CAPACITY COOLING (RATED) | Btu | 9000 | 12000 | 18000 | 24000 |
| CAPACITY HEATING (RATED) | Btu | 9000 | 12000 | 18000 | 24000 |
| MOISTURE REMOVAL | Pts/h | 2.0 | 3.0 | 5.0 | 5.1 |
| AIRFLOW | CFM | 235/285/309 | 235/285/338 | 370/440/529 | 501/574/647 |
| SOUND RATING (MAX.-MIN.) | dB-A | 29/27/26 | 36/33/30 | 38/35/33 | 38/36/34 |
| ELECTRICAL DATA | | | | | |
| POWER SOURCE | V-Hz-Phase | 230/208-60-1 | 230/208-60-1 | 230/208-60-1 | 230/208-60-1 |
| POWER AND COMMUNICATION CABLE | No. x AWG | 4 x 14AWG | 4 x 14AWG | 4 x 14AWG | 4 x 14AWG |
| REFRIGERATION SYSTEM | | | | | |
| CONNECTIONS | | Flare | Flare | Flare | Flare |
| LIQUID LINE O.D. | in | 1/4 | 1/4 | 1/4 | 3/8 |
| SUCTION LINE O.D. | in | 3/8 | 3/8 | 1/2 | 5/8 |
| DIMENSIONS & WEIGHT | | | | | |
| W X H X D | in | 35 7/8 x 7 1/2 x 17 5/8 | | 48 7/16 x 7 1/2 x 17 5/8 | 39 x 10 5/8 x 30 |
| NET WEIGHT | lbs | 39.7 | 39.7 | 49.6 | 70.5 |
| SHIPPING WEIGHT | lbs | 46.3 | 47.4 | 56.2 | 81.6 |

| PERFORMANCE RATINGS | | Multi Outdoor | | | |
|---|-----------|--------------------------|----------------------|--------------------------|--------------------------|
| | | 18k | 24k | 36k | 42K |
| OUTDOOR MODEL | | FPHMR18A3A | FPHMR24A3A | FPHMR36A3A | FPHMR42A3A |
| SPECIFICATIONS | | | | | |
| POWER SOURCE | | 208-230/60/1 | 208-230/60/1 | 208-230/60/1 | 208-230/60/1 |
| EST. YEARLY OPERATING COST | \$ | \$90 | \$172 | \$259 | \$277 |
| RUNNING CURRENT COOLING RATED | A | 6.5 | 8.7 | 11 | 17.5 |
| RUNNING CURRENT HEATING RATED | A | 7.3 | 8.7 | 13 | 17 |
| POWER INPUT COOLING MIN. - RATED - MAX. | W | 1440 (510-2610) | 1920 (420-2640) | 2520 (700-5000) | 4020 (700-5000) |
| POWER INPUT HEATING MIN. - RATED - MAX. | W | 1530 (450-3510) | 1920 (420-4020) | 3060 (600-6000) | 3870 (600-6000) |
| POWER AND COMMUNICATION CABLE | No. x AWG | 4 x 14AWG | 4 x 14AWG | 4 x 14AWG | 4 x 14AWG |
| DIMENSIONS W x H x D | in | 33 7/8 x 26 3/8 x 12 1/4 | 37 3/8 x 33 x 13 3/8 | 37 3/8 x 41 3/8 x 13 3/8 | 37 3/8 x 41 3/8 x 13 3/8 |
| NET WEIGHT | lbs | 108 | 159 | 186 | 196 |
| SHIPPING WEIGHT | lbs | 119 | 170 | 216 | 225 |
| REFRIGERATION SYSTEM | | | | | |
| REFRIGERANT | | R410A | R410A | R410A | R410A |
| FACTORY PRECHARGE | oz | 63 | 81 | 106 | 120 |
| FACTORY PRECHARGE | ft | 50 | 75 | 100 | 125 |
| LIQUID LINE O.D. | in | 1/4 | 1/4 | 1/4 | 1/4 |
| SUCTION LINE O.D. | in | 3/8 | 3/8 | 3/8 | 3/8 |
| MIN./MAX. LINE LENGTH (EACH) | ft | 25/82 | 25/66 | 25/66 | 25/66 |
| LINE LENGTH (TOTAL) | ft | 164 | 197 | 197 | 262 |
| MAX. HEIGHT DIFFERENCE | ft | 49 | 49 | 49 | 49 |
| SOUND PRESSURE LEVEL COOLING | dB | 55 | 59 | 59 | 59 |
| SOUND PRESSURE LEVEL HEATING | A | 55 | 59 | 59 | 59 |
| OPERATING RANGE COOLING | °F DB | 14-115 | 14-115 | 14-115 | 14-115 |
| OPERATING RANGE HEATING | °F WB | -13-75 | -13-75 | -13-75 | 4-75 |
| MINIMUM AMPACITY | A | 21A | 25A | 32A | 35A |
| MAX. TD FUSE/BREAKER | A | 30A | 30A | 50A | 50A |

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.

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



MULTI ZONE CONFIGURATION, AHRI RATINGS

| Friedrich Model | AHRI Reference Number | Indoor Type | System Capacity | EER/EER2 | SEER/SEER2 | High Heat 47 °F | HSPF/HSPF2 | Low Heat 17°F |
|-----------------|-----------------------|--|-----------------|-------------|-------------|-----------------|------------|---------------|
| FPHMR18A3A | 205150429 | Non-ducted Indoor Units | 18000 | 12.5/12.5 | 22.0/21.0 | 18000 | 11.00/9.50 | 12200 |
| | 205150428 | Ducted Indoor Units | 18000 | 11.5/11.5 | 19.0/19.0 | 18000 | 9.60/9.40 | 12200 |
| | 205150430 | Mixed Ducted and Non-ducted Indoor Units | 18000 | 12.0./12.0 | 20.5/20.0 | 18000 | 10.30/9.45 | 12200 |
| FPHMR24A3A | 204101246 | Non-ducted Indoor Units | 24000 | 12.5/12.5 | 22.0/22.0 | 24000 | 11.00/9.05 | 15400 |
| | 204005731 | Ducted Indoor Units | 24000 | 12.1/2.1 | 21.0/21.0 | 24000 | 10.00/8.60 | 15400 |
| | 203999079 | Mixed Ducted and Non-ducted Indoor Units | 24000 | 12.3/12.3 | 21.5/21.5 | 24000 | 10.50/8.83 | 15400 |
| FPHMR36A3A | 204101247 | Non-ducted Indoor Units | 32000 | 12.5/12.5 | 21.0/21.0 | 36000 | 11.00/9.00 | 23200 |
| | 203996910 | Ducted Indoor Units | 32000 | 12.0/12.0 | 19.5/19.5 | 36000 | 10.80/8.90 | 22600 |
| | 203999080 | Mixed Ducted and Non-ducted Indoor Units | 32000 | 12.25/12.25 | 20.25/20.25 | 36000 | 10.90/8.95 | 22600 |
| FPHMR42A3A | 205141512 | Non-ducted Indoor Units | 42000 | 10.5/10.5 | 20.0/20.0 | 42000 | 10.00/8.95 | 24000 |
| | 205141511 | Ducted Indoor Units | 41000 | 10.0/10.0 | 18.0/18.0 | 42000 | 9.50/8.80 | 24000 |
| | 205141513 | Mixed Ducted and Non-ducted Indoor Units | 41500 | 10.25/10.25 | 19.0/19.0 | 42000 | 9.75/8.88 | 24000 |

Select a combination of indoor units that does not exceed the maximum connected capacity, and is within the recommended parameters:

FPHMR18A3A
24,000 Btu MAX.
 CONNECTED CAPACITY
DUAL ZONE ONLY

FOR (2) ZONES:
 MINIMUM combination must be 50% of nameplate capacity

Combinations SHOULD NOT:
 Exceed the maximum allowable total indoor unit connected capacity of 24,000 Btu.

FPHMR24A3A
36,000 Btu MAX.
 CONNECTED CAPACITY
TRI-ZONE MAX.

FOR (2) ZONES:
 MINIMUM combination must be 50% of nameplate capacity

FOR (3) ZONES:
 Select any combination of (3) indoor units.

Combinations SHOULD NOT:
 Exceed the maximum allowable total indoor unit connected capacity of 36,000 Btu.

FPHMR36A3A
48,000 Btu MAX.
 CONNECTED CAPACITY
DUAL/TRI-ZONE/FOUR ZONE.

FOR (2) ZONES:
 Select two (2) 18,000 Btu indoor units

FOR (3) ZONES:
 Select any combination of (3) indoor units with no more than (2) 18,000 Btu indoor units plus (1) other indoor unit.

FOR (4) ZONES:
 Select any combination of (4) indoor units.

Combinations SHOULD NOT:
 Exceed the maximum allowable total indoor unit connected capacity of 48,000 Btu.

FPHMR42A3A
54,000 Btu MAX.
 CONNECTED CAPACITY
TRI-ZONE/FOUR/FIVE ZONE WITH NO BRANCH BOXES

FOR (3) ZONES:
 Select any combination of (3) indoor units with no more than (2) 18,000 Btu indoor units plus (1) other indoor unit.

FOR (4) ZONES:
 Select any combination of (4) indoor units.

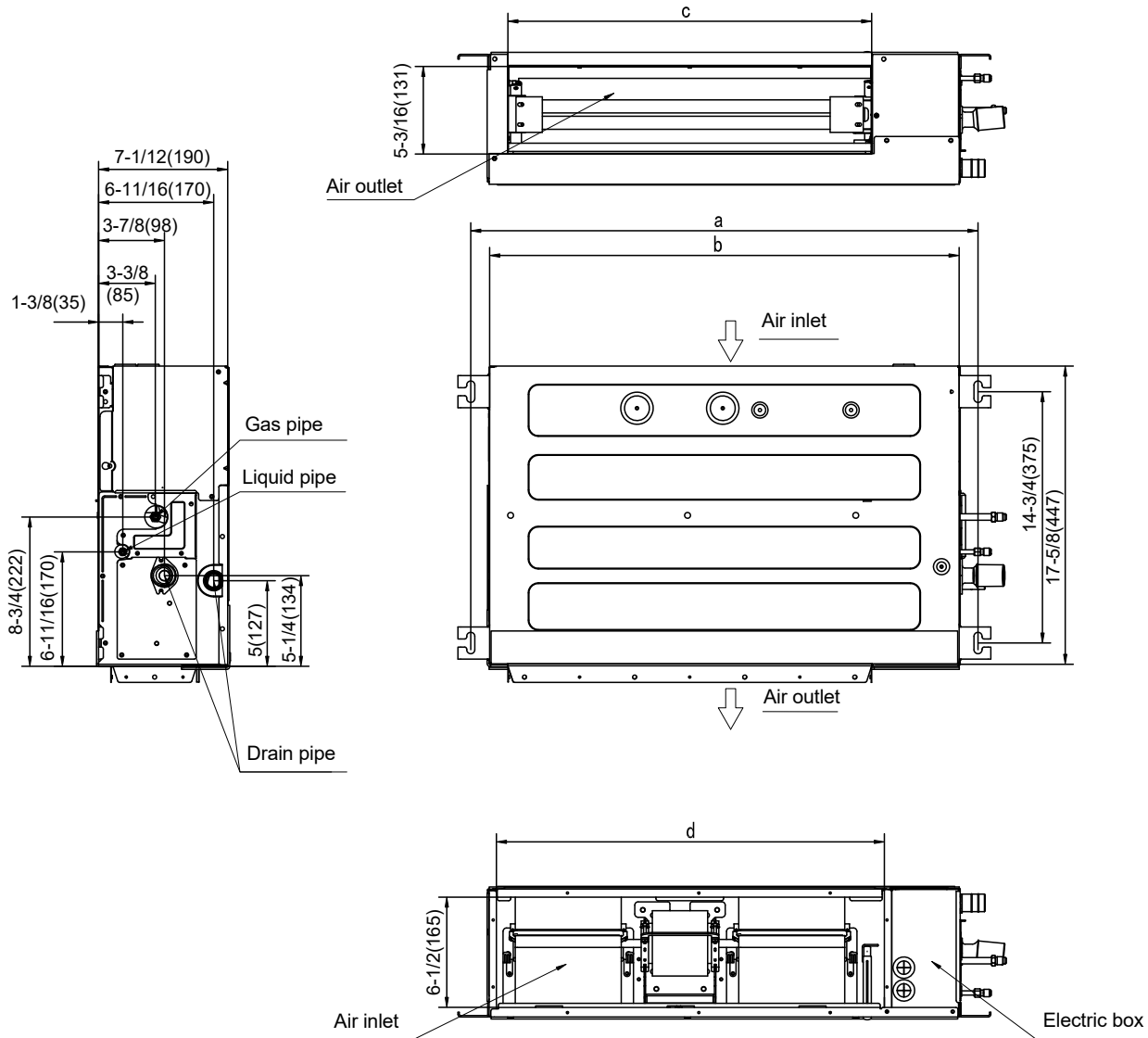
FOR (5) ZONES:
 Select any combination of (5) indoor units.

Combinations SHOULD NOT:
 Exceed the maximum allowable total indoor unit connected capacity of 54,000 Btu.

DIMENSIONAL DRAWINGS

INDOOR UNIT / FPHFD09A3A, FPHFD12A3A,

| | W | H | D |
|----------------|---------|--------|---------|
| FPHFD09A3A (B) | 35 7/8" | 7 1/2" | 17 5/8" |
| FPHFD12A3A (B) | | | |

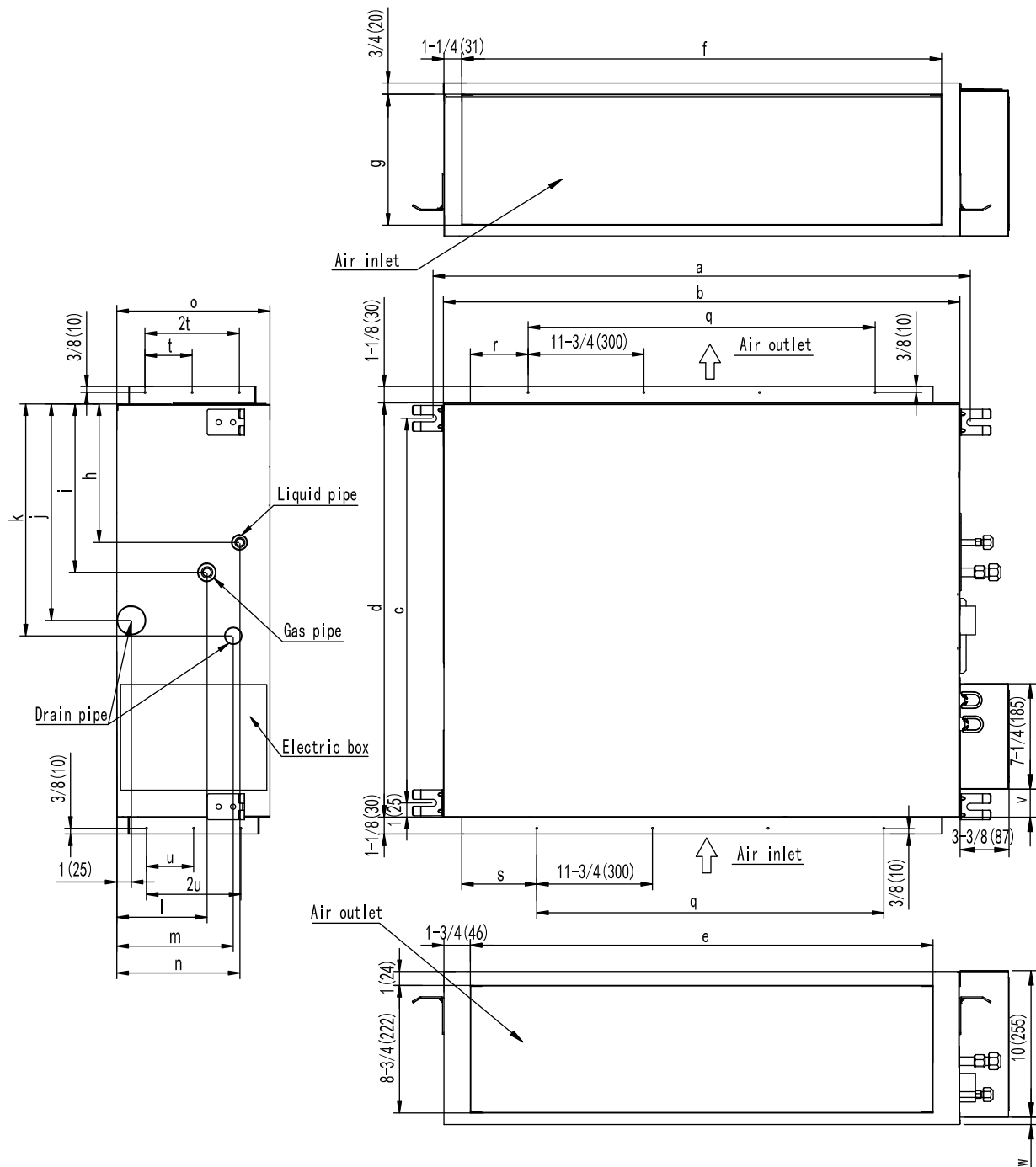


| Model (Btu/h) | a | b | c | d |
|-------------------|-------------------|-------------------|------------------|------------------|
| 9K/12K | 37-13/16 (961) | 35-13/16 (910) | 29-1/2 (749) | 30 (786) |
| 18K | 48-7/16 (1231) | 46-7/16 (1180) | 40-1/8 (1019) | 41-5/8 (1056) |

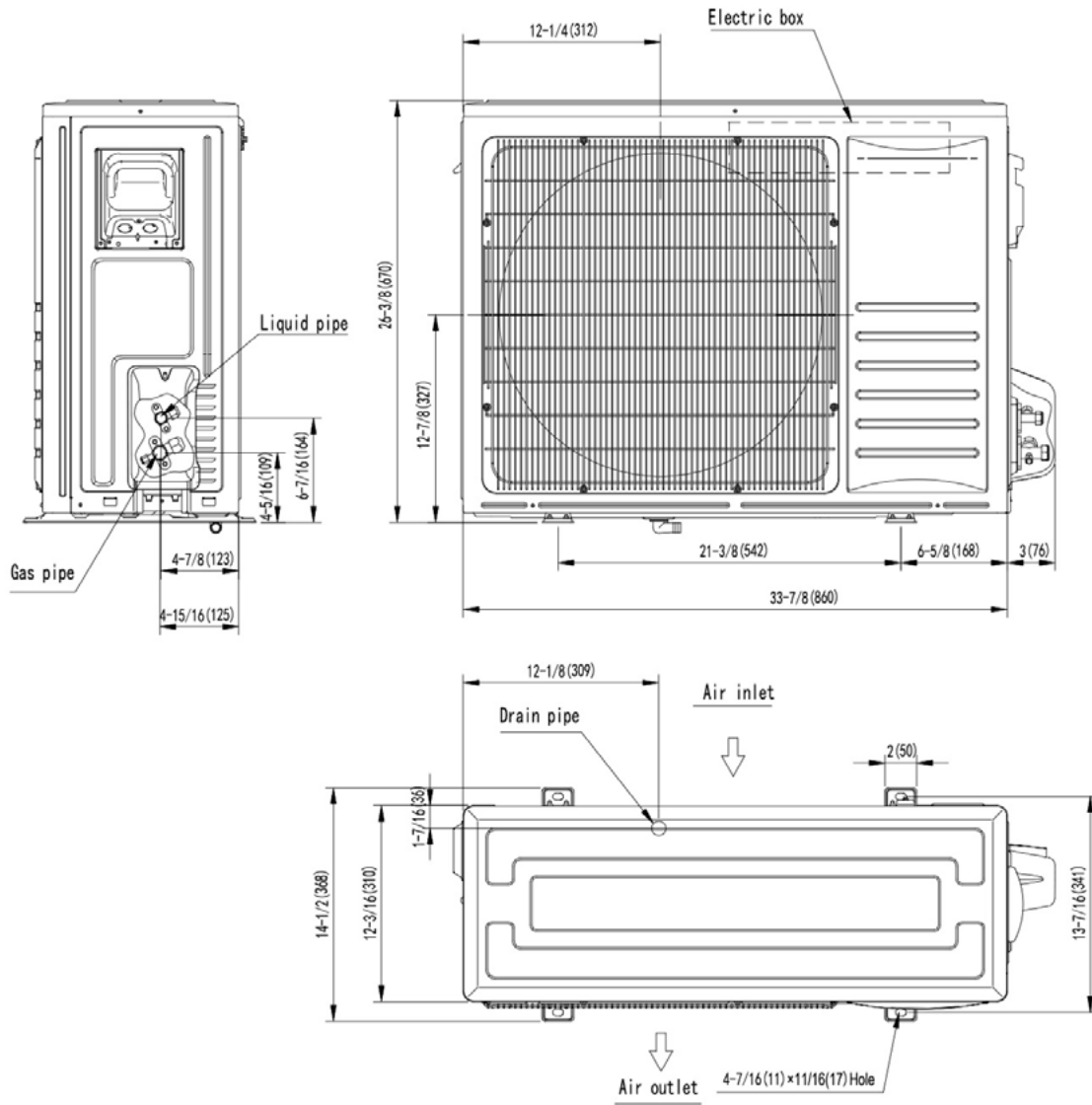
INDOOR UNIT / FPHFD18A3A, FPHFD24A3A

| | W | H | D |
|------------|----------|--------|---------|
| FPHFD18A3A | 48 7/16" | 7 1/2" | 17 5/8" |

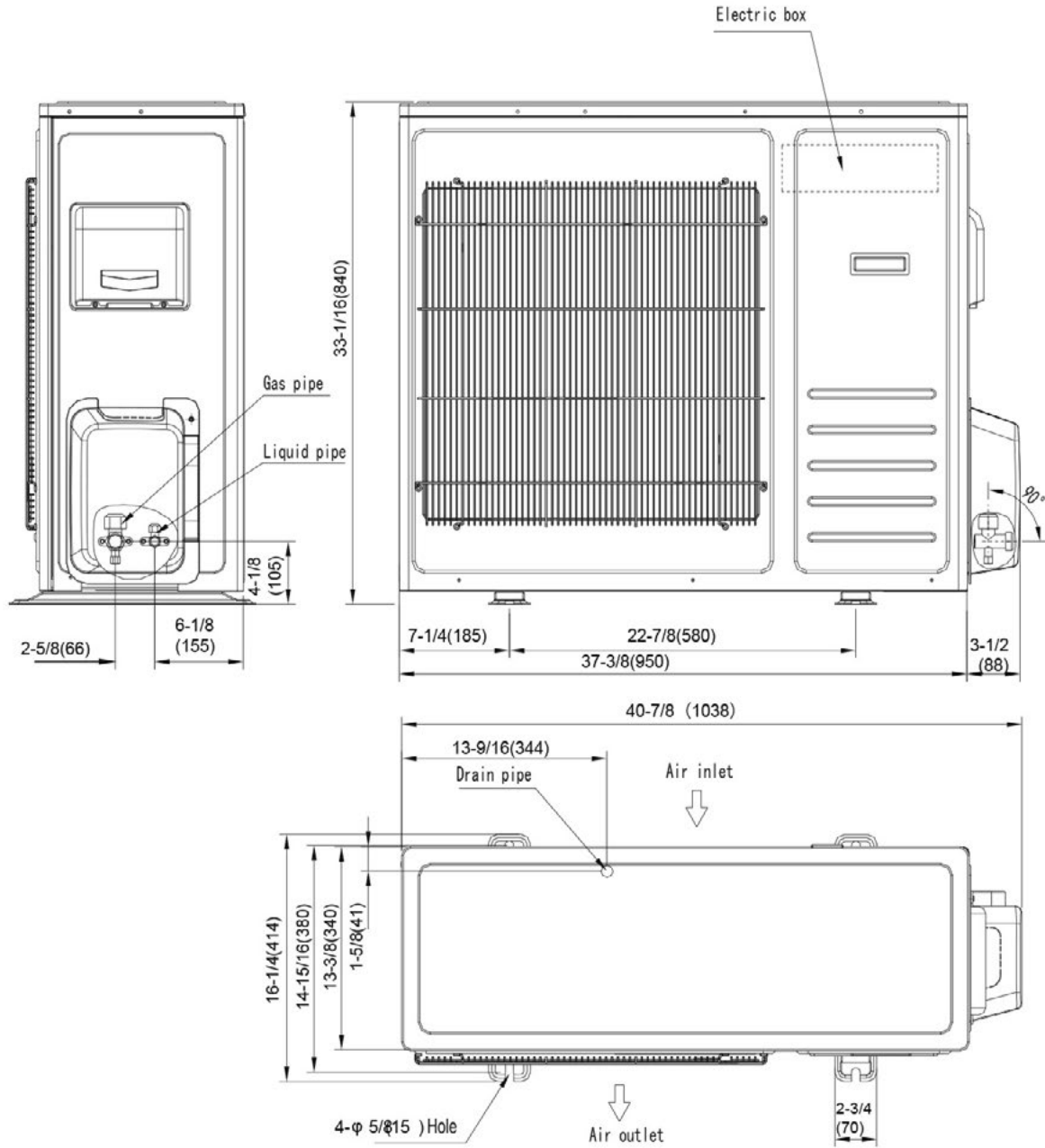
| | W | H | D |
|------------|---------|---------|---------|
| FPHFD24A3A | 55 7/8" | 10 5/8" | 31 1/2" |



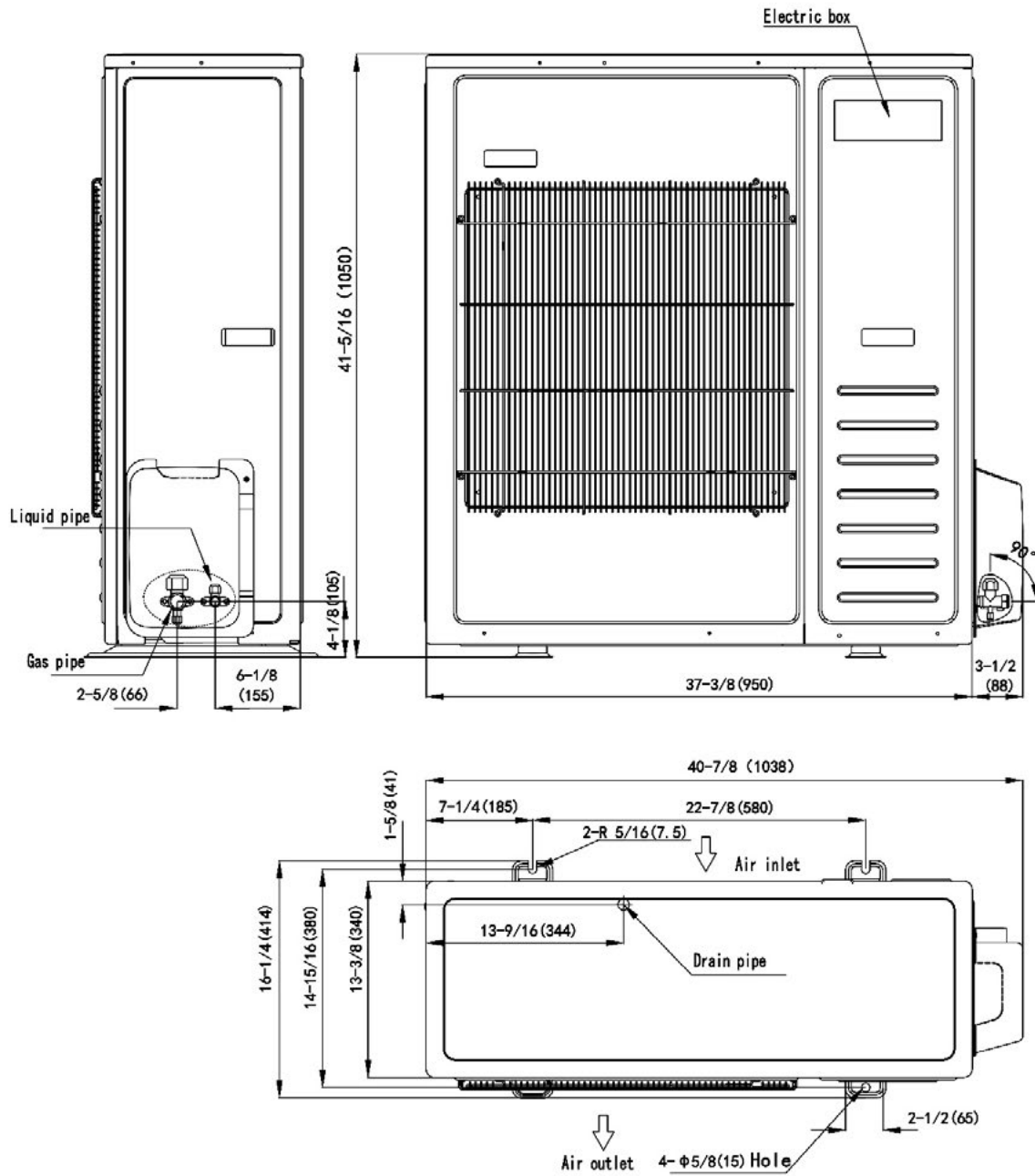
DIMENSIONAL DRAWINGS
OUTDOOR UNITS / FPHMR18A3A



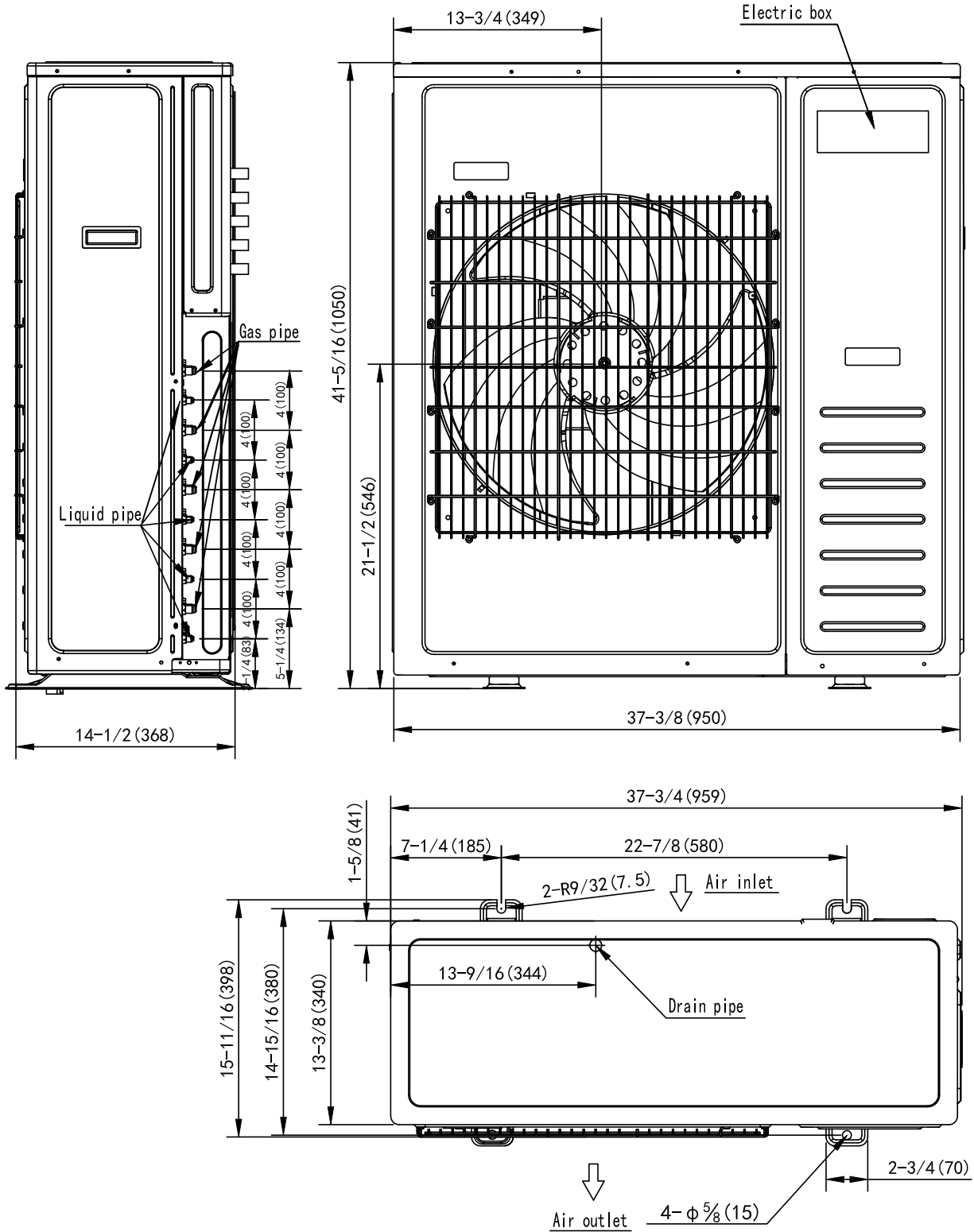
DIMENSIONAL DRAWINGS
OUTDOOR UNITS / FPHMR24A3A



DIMENSIONAL DRAWINGS
OUTDOOR UNITS / FPHMR368A3A



DIMENSIONAL DRAWINGS
OUTDOOR UNITS / FPHMR42A3A



ACCESSORIES

REFRIGERATION LINE SETS (REQUIRED) OUTSIDE DIMENSIONS

| Floating Air® Pro Multizone Outdoor | | | | |
|-------------------------------------|--------|---------|-----------------|-----------------|
| SYSTEM MODEL | Liquid | Suction | 15' Lineset Kit | 35' Lineset Kit |
| FPHMR18A3A | 1/4 | 3/8 | T32150 | T32350 |
| FPHMR24A3A | 1/4 | 3/8 | T32150 | T32350 |
| FPHMR36A3A | 1/4 | 3/8 | T32150 | T32350 |
| FPHMR42AEA | 1/4 | 3/8 | T32150 | T32350 |

*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 Outdoor | | |
|---|------------|-----------------------|
| SYSTEM MODEL | Min. (ft.) | Max. Each/Total (ft.) |
| Floating Air® Pro Multi Zone Outdoor | | |
| FPHMR18A3A | 25 | 82/164 |
| FPHMR24A3A | 25 | 66/197 |
| FPHMR36A3A | 25 | 66/246 |
| FPHMR42A3A | 25 | 66/246 |

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